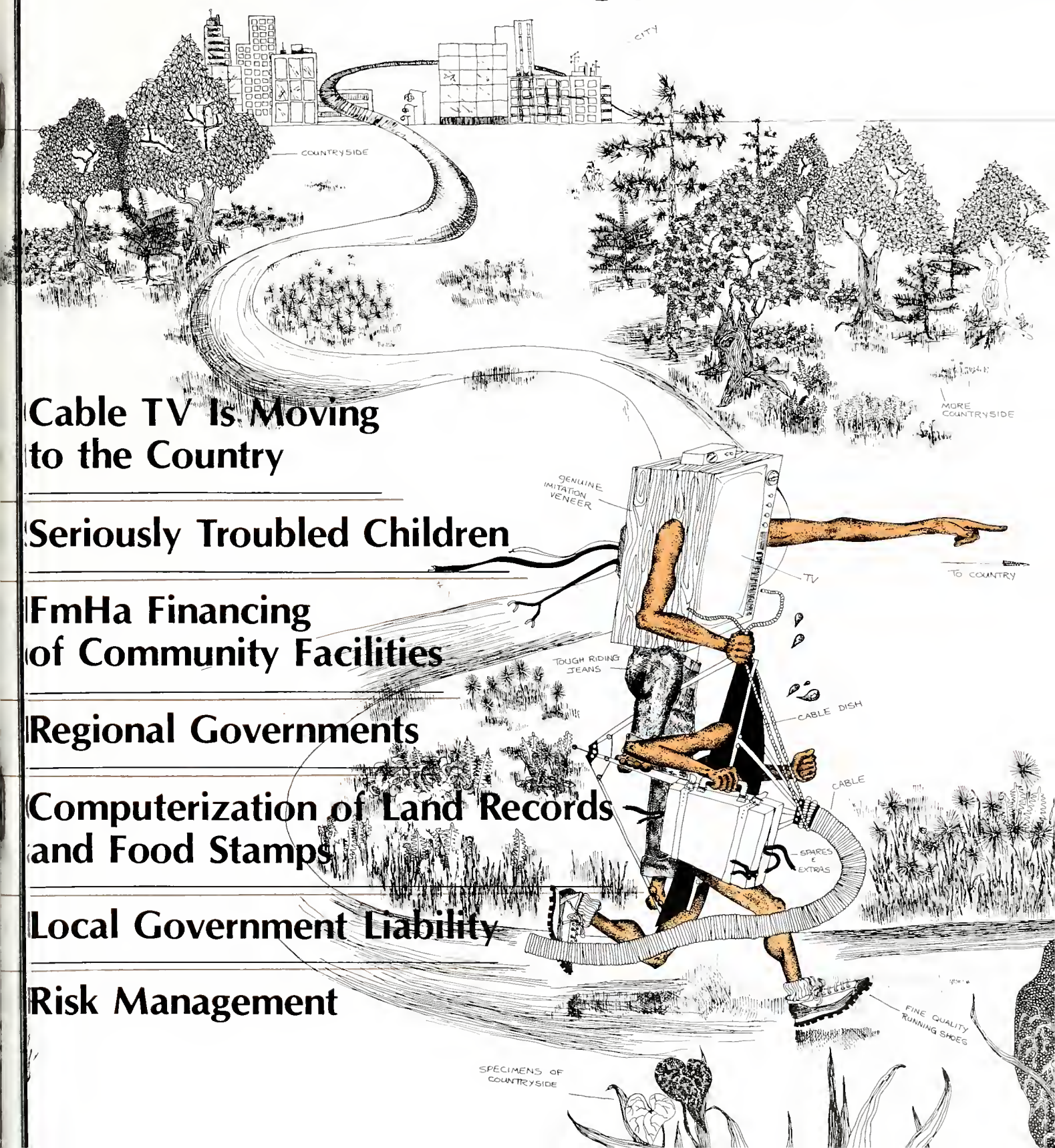
Popular Government

Published by the Institute of Government / The University of North Carolina at Chapel Hill

Summer 1981



PopularGovernment

Vol 47/No. 1

Summer 1981

INSTITUTE OF GOVERNMENT
The University of North Carolina at Chapel Hill

Contents

Cover art: C. Angela Mohr. Photographs: Farmers Home Administration, Raleigh, N.C.; Bringing It All Back Home Study Center, Appalachian State University, Morganton, N.C. Maps and charts by Ted Clark and C. Angela Mohr.

POPULAR GOVERNMENT (ISSN 0032-4515) is published four times a year (summer, fall, winter, spring) by the Institute of Government, Knapp Building 059A, The University of North Carolina at Chapel Hill, Chapel Hill, N.C. 27514. Subscription: per year $6.00. Second-class postage paid at Chapel Hill, N.C.

Cable TV in Unincorporated Areas: What Should County Government Do About It?

Grainger R. Barrett

Extending cable television lines outside municipal limits presents special problems to both the cable operator and county officials.

CABLE TELEVISION is moving to the country—or at least it is beginning to do so. The improved reception and greater choice of programming that cable TV brings have made cable enormously popular. Today it is available to roughly a third of all American households, and some forecasters say that by 1990 the percentage will be 60 or 70 per cent. In the past five years cable companies have vied eagerly for the franchise rights to serve most of the state's towns with over a couple of thousand people. Right now we are at the end of a phase in which these companies bid for franchises, spent two or three years constructing their systems, and consolidated operations in municipalities. Most municipal franchises have now been awarded. As a result, cable companies in many areas are seeking to expand their markets, often from existing systems within municipalities, by constructing cable lines into unincorporated areas and offering cable service to residents outside town limits.

Population densities determine whether cable television can feasibly be brought to an area. Rural areas generally have few entertainment opportunities and poor television reception, but because they are less populated than towns, they have not been considered prime candidates for cable television even though the demand from residents may be great. Improved technology, demographic trends, and the ability to extend into unincorporated areas from a town franchise have now made cable television possible for certain county areas.

As counties grant cable television franchises for unincorporated areas around towns that have already granted cable television franchises, new questions will arise regarding the appropriate legal relationships between town and county cable regulatory powers and between town and county cable television companies. For example, many town cable television franchises contain clauses requiring the cable company to extend service to annexed areas. If the county grants a cable television franchise to another company, those municipal clauses may conflict with the rights of a county's cable operator who has extended cable lines to an area that is subsequently annexed. Even if the town and the county grant franchises to the same company, questions may arise concerning which governing board should approve rate increases or other actions like transfer of control of the cable company's ownership.

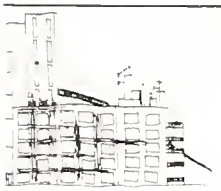
What is cable TV?

Cable television originated as a system that used a master antenna to receive "over-the-air" broadcast signals from television stations, "boosted" the signal, and distributed it through wires to subscribers. Today cable television usually also includes an "earth station" that receives signals transmitted by satellite and redistributes those signals along the cables. In some areas, microwave relays may be used to send the electronic signals between geographically removed areas to sites where they are then sent down cables to subscribers' homes.

Curiously, the city and county local government statutes define cable television somewhat differently.[1] The city statute, adopted in 1975, reflects the technological prospect of satellite program transmission. The county statute, adopted in 1973, reflects the view of cable as a system of boosting "over-the-air" television station sig-

The author is an Institute faculty member whose fields include local government administration.

1. N.C. GEN STAT § 153A-137 (county); *id.* § 160A-319 (city).



The state does not regulate cable television in any manner. But it has authorized cities and counties to franchise cable television . . . .

nals; it was not amended in 1975 to conform to the city statute's definition. The key element in both definitions, however, is that the system distributes the electronic signal "by wire or cable" to the public. The city statute excludes from the definition facilities that provide master antenna services to property owned or leased by one person. The county statute is somewhat more precise; it excludes a facility that serves only the residents of one or more apartment dwellings under common ownership or control.

When cable television's electronic signal arrives at a subscriber's television set, it occupies a certain width in an electronic spectrum, much as an over-the-air television signal does. The ordinary television set is engineered to accept twelve video channels. Modern cable technology, however, can amplify and transmit many more channels. Cable television systems built in the late 1960s and early 1970s were engineered to bring 12 channels to the subscriber. Today that channel capacity can be expanded to 35 or even 54 or more channels by attaching an electronic box, called a "converter," to the television set. Other new technology, although not now always economic to provide to all subscribers, permits two-way use of the cable to send a signal not only *to* the subscriber ("downstream") but also *from* the subscriber ("upstream") to the distribution center (the "head-end").

The typical cable television system being built today in North Carolina has at least 35 channels (300-400 megahertz) and two-way potential. Customers who subscribe to program tiers that require more than 12 channels receive a converter. An "earth station"—or a "receive-only" satellite antenna—picks up pay-TV and other satellite-transmitted programs. Rates for basic service average from $6 to $8 monthly; additional outlets cost from $1.50 to $4. Installation can range from $15 to $25. An expanded service tier that offers, typically, 16 or more activated channels may cost $3 to $5 extra monthly. Pay-movie packages run from $5 monthly for a movie service during limited hours up to $8 to $10 for movie channels like HBO (Home Box Office). Converters may be provided free of charge, or with a deposit of $20 or so, or rented for $2 or $3 monthly.

Local government powers

The federal agency that regulates cable television is the Federal Communications Agency (FCC). Over the last five years it has substantially deregulated cable television, and it continues to do so. The FCC shares regulation of many cable television issues with state and local governments. In North Carolina, it shares this authority with local governments[2]—the state does not regulate cable television in any manner. But the state has authorized cities and counties to franchise cable television,[3] and under North Carolina statutes, a municipality could even own and operate a cable television system itself.[4]

The counties are authorized to franchise cable television systems in the unincorporated areas of the county.[5] A county may "make it unlawful to operate such a system without a franchise." It appears that unless it is required to obtain a franchise before constructing or operating a cable television system, a cable TV company is free to offer cable wherever in the county and on whatever terms it chooses, consistent with the now rather minimal requirements of the FCC. While it is advisable to request bids for cable television franchises in order to secure the benefits of competitive proposals and to hold a public hearing in order to obtain public comment on the community's needs and desires, neither a bid nor a public hearing is a legal prerequisite to granting a cable television franchise. A county may grant franchises for "any portion" of the unincorporated areas of the county. This language seems to allow a county to grant franchises to different operators for different districts within the county if it chooses to do so. If a franchise is granted, the grant must be by ordinance, and the ordinance must be passed at two regular meetings of the board of commissioners.[6]

The technology of expansion

Although cable television has been around in some North Carolina towns since the mid-1960s, it has only recently been practical to introduce cable in some rural areas. When cable television first arrived in North Carolina, it was primarily a method for enhancing the reception of signals of television stations in the region. But it has also become a means of obtaining additional entertainment programming since satellite programming began in 1975.

Cable programming is considered a good entertainment buy in these days of sharply rising costs for almost everything. A viewer can watch cable television from the comfort and convenience of his home. He need not use expensive gasoline to drive to a sports event or a first-run movie. In rural areas, viewers may not have easy access to the other entertainment that may be next door for the urban resident. And in the next five years, cable television will become increasingly important as a distributor of information—financial quotations, burglar-alarm systems, want ads, and even classroom and on-the-job instruction.

2. See, generally, as to local government regulation, Barrett, *Franchising Cable Television Today*, POPULAR GOVERNMENT (Winter 1980, Institute of Government).

3. N.C. GEN STAT 153A-137; *id.* § 160A-319.

4. *Id.* § 160A-311.

5. *Id.* § 153A-137.

6. *Id.* § 153A-46.

But precisely because these are inflationary times, extending cable TV is an expensive proposition for a cable company. Cable is costly to install. Construction costs can run from $6,000 to $8,000 a mile when utility poles are used and even up to $15,000 per mile for cable installed underground. Telephone wires have to be moved on telephone poles. Sidewalks and streets may be disrupted during construction. A "headend" facility—where the electronic processing takes place—can cost up to $100,000, and an earth station—or satellite receiving dish—can run $30,000. The top-quality cable and electronic amplifiers required by today's high-performance technology are also expensive. Converters can vary widely from $20 to $70 each—and hundreds or even thousands may be required for a given area, even before the expected vandalism and pilferage take their toll.

These amounts must be available to a cable company before the first customer is hooked on. Most construction expenses may be incurred before half of a system's ultimate customers subscribe. When they hook on, the cable company will get its hundreds of thousands of dollars back in, typically, $8 to $15 monthly pieces.

These economics make cable unprofitable in areas that have less than a certain population density. The cable industry measures densities in number of homes per mile or, more accurately, average residences per mile of activated cable. With a figure like 35 homes per mile, cable companies will assume that a certain number of those homes will become subscribers, that a certain number of those subscribers will also take a pay-TV option, and that the result will be an average amount of revenues a month from each subscriber.

Until 1979 the FCC had restricted the provision of cable television by telephone companies; but two years ago, recognizing that sparsely populated rural areas may have difficulty attracting interest from profit-oriented cable television companies, it proposed to allow telephone companies to provide cable television service if certain conditions were met. At present a telephone company may provide cable service if (1) it commits itself to serving all areas with a density of 30 homes per mile or greater, and (2) no private cable company is ready, willing, and able to provide comparable cable service. The burden is on a private, profit-oriented cable company to challenge the telephone company's plan.[7] The greatest interest thus far in North Carolina as a result of this new policy has been expressed by rural telephone membership cooperatives and the North Carolina Rural Electrification Authority office of the State Department of Commerce, which supervises those cooperatives. Because of a consent decree entered into by American Telephone and Telegraph and the U.S. Department of Justice in the 1950s, the Bell System companies are still precluded from entering the cable television field.

Profit-oriented companies in North Carolina provide cable television to areas with from 30 to 50 homes per mile, 35 or 40 being most common (even in counties). Demographic trends throughout the 1970s make certain unincorporated areas realistic prospects for cable television service today. First, many small towns grew enough over the past decade to become attractive for cable television. Cable has seeped out into unincorporated areas from these municipal bases. Second, satellite programming increased demand for cable television service. The first-run movies, continuous sports channels, superstations like WTBS (Channel 17), children's programs, and all-news networks have been available only in the last five years. These alternatives to network television and movie houses draw a higher percentage of subscribers from the potential market than when cable merely offered improved reception, and that larger group takes more of cable's profit-boosting pay-TV services. Third, population has shifted away from core cities to the country or subdivisions near the urban fringe. Therefore more of a given area's population may be found in the unincorporated edges of a town than in the town itself. Thus there are more potential customers just outside the municipal limits—and a town cable company's franchised jurisdiction—when a cable company has saturated the town and looks at the enticing expansion market in the urban fringe.

In the next five years, cable television will become increasingly important as a distributor of information — financial quotations, burglar-alarm systems, want ads, and even classroom and on-the-job instruction.

Expansion into the county from a municipal cable television system may be feasible because cable is an industry with an incremental cost/profit pattern. It costs less, proportionately, to build and extend a cable system past a certain point than to reach that point if a minimum number of customers subscribe to the system. If every customer pays the same monthly charge, the profit margin is dramatically increased for every customer hooked up beyond that threshold.

The cable industry's practical limitation on expansion beyond town boundaries is technological. One headend can transmit electronic signals only so far before they degrade and

7. 44 Fed. Reg. 7515, Dec. 19, 1979, amending 47 C.F.R. § 63-54 and § 63.601. The conditions are phrased as a rebuttable presumption that a relationship with a telephone company will be necessary to bring cable services to areas with densities of 30 homes per mile or less. The FCC's original restriction on cross-ownership between cable companies and telephone companies stemmed from a belief that private operators could not surmount the competitive advantage that telephone companies would have by having poles and wires in place past most rural homes, facilities paid for by public utility customers.

picture quality is lost. In cable jargon, this distance is the length of the "cascade." The cascade is the number and pattern of amplifiers placed along the cable at intervals to clean and boost the signal. Today a cascade of up to 25 amplifiers is typical, and it may cover 15 miles. Some new equipment now may be able to transmit good pictures for up to 35 amplifiers or 20 to 25 miles, but it requires thorough maintenance and inspection.

Cable economics in rural areas

The problems that rural areas present in cable economics are apparent. First, fewer people live in a given area, so there are fewer customers to spread high construction costs over—relatively few rural areas do have 35 or 40 homes per street mile. Second, distances obviously are greater, and the operator must construct that many more expensive miles of cable. He may have to pass long stretches of virtually no customers at all in order to reach relatively dense pockets further on. Third, engineering a cascade that will reach the dispersed unincorporated areas that may qualify for cable service from one headend may be difficult. And a cable operator may find that providing customer service and maintenance operations is relatively more expensive in rural areas than in town. The result often is that only the populated string of subdivisions along a main highway leading out of town may receive cable service from some cable companies.

Clearly, then, rural areas are less attractive than towns for cable companies. Nevertheless many cable companies are entering rural areas as the number of still-unawarded municipal franchises diminishes or because they see rural areas as an extension of municipal cable operations. Most county commissioners who will vote on granting a cable franchise probably know relatively little about cable—just like most other public officials. Cable companies, on the other hand, are in the business of dealing with local government officials—often in a variety of jurisdictions—and thus may have the informational advantage. Rural residents know only that they want cable television—and soon.

Key issues

Some issues are more relevant to cable television in unincorporated areas than to cable television in towns. The primary differences are that the economics are not as attractive, that fewer "frills" like public-access studios should be expected, and that, realistically, a substantial portion of the rural population may never be served. But there are a number of other important issues.

Should the county require a franchise? Some counties may conclude that a franchise need not be required before cable television operations are allowed in unincorporated areas. After all, what is peculiarly public or governmental about cable television? Why not let private market forces regulate cable? Still, I believe that a franchise should be required, primarily as a way to see that as many county residents as possible have the opportunity to choose whether to subscribe to cable TV. Also, franchise requirements can help to ensure that the cable operator provides proper maintenance and customer service, carries adequate insurance coverages, and completes promised construction on schedule.

Demographic trends throughout the 1970s make certain unincorporated areas realistic prospects for cable television service today.

There are other considerations. Cable television franchises typically run fifteen years or more. Usually only one cable company serves any specific street, for economic reasons. But over the term of the franchise the cable system may become technologically obsolete. Yet the operator may not make the large capital investment to update the system. If he did so, he might show a net loss (although with depreciation charges he might still have a positive cash flow), while the current system is paid for and he makes a substantial profit from it.

Cable companies assert that they are not public utilities—which in a sense may be true, but neither was the telephone in the 1920s. Cable television does have a lot of public involvement. It uses public rights of way (but not *county* rights of way, since counties do not own streets) and, at modest cost, telephone poles that were paid for by a public utility's customers. The radio or television audience listening to public airwaves can change stations. Realistically, a cable customer simply does not have the choice of switching to another cable company's package of channels. Many telephone companies allow one company's cable wires on its poles; furthermore, in North Carolina usually it is simply not economical for two cable companies to build separate cables down the same road. As a result, a customer who does not like the programming or the rate can drop his cable service, but he cannot change to another cable company. This use of public rights of way and utility company property and the monopoly position vis-a-vis another cable choice suggest the public interest in franchising cable television operations.

The statutes[8] do not list cable television as one of the "public enterprises" that a county is authorized to operate. On the other hand, they do list cable TV as a public enterprise that a *city* may operate or franchise.[9] The North Carolina Supreme Court seems to have identified some of the characteristics of public utilities in the following comments:

> A *quasi*-public utility receives well-defined and valuable privileges not accorded a private regulated corporation. The

8. N.C. Gen Stat § 153A-274, -275.
9. *Id.* §§ 160A-312, -319.

> government purposely grants it monopolistic rights and vests in it some of the powers of government like the right of eminent domain. By no means the least of these governmental benefits is the assurance that its stockholders shall have a fair return on their investment.
>
> In return the State reserves the right to supervise and regulate its operations and fix or approve the schedule of rates to be charged by it for its intrastate service.[10]

Cable television service ordinarily is not provided by exclusive monopolies, yet it is a practical monopoly. Cable franchises ordinarily do not grant the power of eminent domain but usually do grant permission to use public right of way that are not shared by other nonregulated companies. Cable TV rates may be regulated by counties and towns for basic service but not for pay TV. And rates are usually set to assure a certain rate of return.

A county may decide not to require a cable television franchise. In that case cable companies apparently are free to operate and expand in unincorporated areas as they wish. If there is only one cable company within the county, it will probably be based in town. Only residents of the urban fringe will be served. Residents of other unincorporated areas will not get cable service. If more than one company operate in the county, the long-range danger is that, as the companies compete to serve attractive areas by reaching them first, they will expand in a haphazard manner that results in inefficient cascades. Those inefficiencies may result in higher operating costs passed on to customers in their rates.

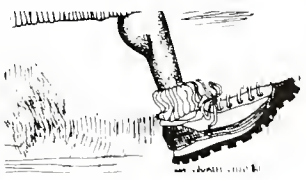
Must existing cable companies be "grandfathered"? A company may establish itself in the county before the county passes an ordinance requiring a franchise. May the board legally require that company to apply for a franchise? In my opinion, the answer is "yes," but there is no certain precise answer. The franchise statute states that the county may make it unlawful to operate without a franchise. A reasonable interpretation of this provision is that the county is not required to "grandfather" the company and that the company could be required to apply for a franchise.

Are the commissioners obligated to grant a franchise? No. The board of commissioners is never obliged to grant a cable television franchise, even if it has required a franchise in order to operate an existing cable television system.[11] North Carolina zoning cases can be interpreted to suggest, by analogy, that the commissioners may choose to "amortize-out" an existing company by giving it several years to terminate operations or obtain a franchise.[12] One county resolved this situation by granting such a company a "pre-existing permitted use" franchise that allows the company to continue to operate but prohibits it from expanding its system.

The public interest in wide coverage. Requiring a franchise is one way to impose certain public obligations and confer profit-making rights on cable operators. In particular, a board of commissioners can decide that widespread coverage is in the public interest—the wider, the better. As many residents of unincorporated areas as possible should be able to subscribe to cable television. The number that will have the option will be determined by the density formula—or homes per mile—that is negotiated between the county and the operator. Many counties have negotiated densities of 35 or 40 homes per mile, and some have agreed on 30 homes per mile. If a cable franchise is awarded, as many residents should be able to subscribe as is consistent with a fair profit to the operator—citizens seem to think it unfair if only a certain few of a jurisdiction's residents are offered cable service. And furthermore, widespread coverage will maximize the benefit stemming from the coming development of cable as an information-distribution system. Many of those information applications—such as want ads, burglar-alarm systems, and library-retrieval systems—will be particularly useful to relatively rural residents. In the future, cable may carry such activities as agricultural extension programs, emergency medical training, education of handicapped children, General Assembly sessions, and meetings of county commissioners and boards of education.

The nature of unincorporated areas makes "skimming the cream" more of a concern there than within municipal limits. An operator may want to expand beyond the town, but only to the most profitable customers and areas. He may decide to serve the affluent subdivisions and the population pockets strung along major highways. When he takes the best areas, the inevitable result is that what is left is unattractive and uneconomical to any other cable operator. So the first operator not only takes the best but may effectively deny any cable service to the county's other residents. County residents denied service may find it difficult to understand why they are not served when cable lines

Expansion into the county from a municipal cable television system may be feasible because cable is an industry with an incremental cost/profit pattern.



10. Utilities Comm'n v. State and Utilities Comm'n v. Telegraph Co. 239 N.C. 333 (1953).

11. See Cablevision of Winston-Salem v. Winston-Salem, 3 N.C. App. 252 (1968).

12. *See, e.g.*, State v. Joyner, 286 N.C. 366 (1975) (salvage yard amortized under zoning ordinance), and Cumberland Co. v. Eastern Federal Corp., 48 N.C. App. 518 (1980) (billboard amortized under sign ordinance). Cable television is more capital-intensive than salvage yards or billboards, a fact that in the early years of a cable investment would affect what is a *reasonable* amortization period that would permit the investment to be recouped.

A franchise should be required, primarily as a way to see that as many county residents as possible have the opportunity to choose whether to subscribe to cable TV.

run nearby to other residents. This problem can be alleviated by a fair and realistic density formula reached by the board of commissioners and the cable company.

Will the same company serve town and county? A major determinant of what the county should expect is whether the cable company that applies for a county franchise already operates in one of the county's towns. If so, a new headend with concomitant expense will not be needed. Still, the location of the headend will affect which areas will be served because the spot will determine the length and location of the cascade. The operator may want the county to share a public and governmental access channel with the town. The programming that the operator offers will almost always be just what he provides in town, no more and no less. The operator may ask the county to adopt exactly the same ordinance as the town adopted. The fact that a company has obtained a franchise in town almost inevitably will reduce a county's flexibility in negotiating the conditions of a county franchise.

Service and line extensions. Another issue of particular importance in county cable franchises is the requirements, if any, of a service-extension policy. The company ordinarily has an incentive to agree to service extensions; once the cable is in place, the major expense is behind and the company can look forward to the revenues from the new customers. A service-extension policy complements the density formula. Every county cable television ordinance should contain a service-extension clause.

Service-extension policies require the cable company to extend cable to a group of customers that does not meet the density criteria if the customers share—or bear—the cost of the extension. For instance, the company may have to extend if one or more customers petition for service and are willing to reimburse the company's actual cost. Or the customers may share the cost with the company, since the company will benefit; some franchises require the company to contribute toward the extension a share proportionate to what its cost would be if the area did meet the density criteria. Some provision should always be made in service-extension policies for refunds to the original contributing customers as additional customers hook up after the cable is extended.

Another approach to service extensions is to require the cable company to extend to those areas that will provide the company a certain number of *actual customers* (as opposed to homes passed, or potential customers). The appropriate number of actual customers who may petition should equal the density (for example, an average of 40 homes per mile), times the penetration rate the company has forecast, times the number of miles of active cable. The penetration rate is merely the number of actual customers expressed as a percentage of the homes passed by cable. Thus this approach focuses on actual customers rather than homes passed. Sometimes the area to be served will be significantly larger when calculations are based on actual customers.

A related question concerns line (rather than service) extensions. This refers to the length of the "drop" from the cable at the street to the residence itself. Many ordinances provide that the cable company may charge its actual labor and materials costs as an installation fee if the drop is longer than some specified distance, such as 200 feet. The long dirt driveways often found in rural areas make this an important point for a county ordinance. A customer's installation cost might be $100 or $200 instead of the usual $15 to $25 installation fee if a line extension is necessary.

Construction schedules. Because unincorporated areas require more miles of constructed cable, the board of commissioners should realize that construction may require several years. Citizens are likely to become impatient and want to know when they can expect cable in their neighborhoods. Since construction will take so long, the county should specify a realistic construction schedule that the company must comply with once the franchise is granted.

The construction schedule is an important clause in any cable television franchise ordinance, but particularly in the county. The most frequent complaint about some cable companies is that the system took much longer to build than the company promised when it eagerly applied for the franchise. A cable company may indicate that it is overextended financially if construction stops or slows substantially in an effort to stem cash outlays.

Connections for public buildings. Another issue the board of commissioners may want to examine is whether the cable company would be required to connect all public buildings. Such a clause is often standard in municipal cable franchises, but for understandable reasons it is rarer for counties. The main county building is the courthouse, and it is usually in town. Therefore the cable company will have to obtain rights of way from the town (if it is not the town's franchisee) simply to obtain physical access to the courthouse. The other public buildings are mostly schools, and they are probably spread all over the county. Cable lines probably will not be constructed near many of them, and the cost of wiring all schools could therefore be substantial—$6,000 a mile or more.

Yet educational applications are one of the significant public uses of cable television, and they will expand greatly when cable's two-way potential is realized. A board of commissioners should consult with the school board and its superintendent before it awards a franchise to determine their interest in cable's educational uses. At a minimum, a cable company will

usually agree to connect schools and public buildings within a certain distance of their activated cable and to work with local officials to connect the courthouse.

Annexations. Finally, the commissioners should consider what happens if the county and the town have different cable operators and the town annexes an area served by the county operator. The legal status of both operators is unclear,[13] and legislation on the topic is needed badly. Questions that can arise include: Who approves rates? Who receives the franchise fee? Can a town impose an additional franchise fee or a privilege license tax? Who approves transfers of control? Whose insurance coverage requirements apply? To which body should customer complaint appeals be directed?

Although the statute[14] states that municipal ordinances (including, presumably, cable TV ordinances) apply in annexed areas, certain other constitutional principles—such as those relating to impairment of contracts—could be interpreted to protect the county operator's right to remain there during the initial term of his county franchise. But if the county ordinance continues to apply to the county operator in the newly annexed area, the city council will set rates for most citizens inside the town limits but not for some; rates for these others would be set by the commissioners. The question may be asked whether the town can require the county operator to obtain a town franchise also and to pay the town a franchise fee.

What can the commissioners do? In the absence of statewide legislation, these and other issues can be anticipated and dealt with jointly by the county and town through interlocal cooperation agreements under Article 20 of Chapter 160A.

There is also an economic reason not to preclude county cable operators from continuing to serve annexed areas. Areas that qualify for annexation generally are precisely the ones that are attractive to cable companies—denser, developed areas in the urban fringe. From an economic point of view, an operator simply could not provide cable service to counties without these areas' revenues. Cable companies may be reluctant to serve county jurisdictions if they can be forced to leave the heart of their system because of the cumulative affect of annexations over the 15-year term of the typical franchise. In that case, the urban fringe areas might ultimately get cable service as annexations occur—especially if one company is franchised in both the county and city—but the rest of the county probably would not get it. Thus the annexation issue could dissuade or delay cable companies from offering cable television to the county's rural residents.

Conclusion

Unincorporated areas have recently become attractive to cable TV companies. County commissioners have authority to require that cable TV companies obtain franchises. Without such a franchise requirement, the companies apparently may expand into the county as they wish. County commissioners who understand the economics of cable will have an advantage in the franchising process. I believe that the main thrust of franchising should be to give as many county residents as possible the chance to subscribe, and to ensure that construction schedules are met. Other issues, such as service extensions and the impact of annexations, can be anticipated and dealt with when the franchise is granted. Commissioners who take the time to familiarize themselves with cable TV will be able to negotiate franchises that will serve not only their constituents but also the public interest. ■

13. The North Carolina cases that shed most light on the question seem to be P.H. & Greene Elec. Mem. Corp. v. Carolina P. & L. Co., 261 N.C. 716 (1964); Duke Power Co. v. Blue Ridge Elec. Mem. Corp., 253 N.C. 596 (1961); and Pee Dee Elec. Mem. Corp. v. Carolina P. & L. Co., 253 N.C. 610 (1961).

14. N.C. GEN. STAT. §§ 160A-37(f), -49(f).

Risk Management in Local Government

Robert Haynes and Lee Armour

Protecting a local government against catastrophic losses means more than merely buying insurance. It requires a healthy dose of pessimism, careful analysis, and long-range planning.

LOCAL GOVERNMENTS are increasingly interested in risk management. Risk management for local units means protecting assets against accidental loss at the most economical cost, i.e., a systematic method of dealing with risks or hazards. The objective is to prevent the shock of a catastrophic loss and minimize the adverse consequences of lesser unforeseen financial losses. Risk management is not the same as insurance management—buying insurance is just one aspect of risk management, and it is not always the best way to handle a risk. Unfortunately, many local governments do not have the specialized staff or the time needed for risk management, and they rely totally on an insurance agent or broker to fulfill their risk-management needs. Consequently, many local units purchase a standardized product not tailored to their individual needs. Such jurisdictions are not practicing sound risk management because they are treating only those risks that are commonly recognized (i.e., insurable) and are not searching for ways to reduce the cost of risk. The practice of relying on insurance agents to perform the risk-management function has resulted in patchwork programs, both overinsurance and underinsurance, overlapping coverage, gaps in coverage, excessive cost, and unanticipated losses.

The authors are, respectively, the management analyst and the deputy director of the Centralina (Region F) Council of Governments.

This article will define the principles of risk management, describe the steps that are taken in a risk-management study, and identify some common problems in risk management that local governments face.

The risk-management process

The risk-management process has four steps: (1) identifying and measuring a risk; (2) devising various possible strategies or "treatments" to manage the risk; (3) putting the chosen treatments into operation; and (4) reviewing and evaluating the chosen treatments in order to keep up with changing conditions and insure that the plan is working properly.

A local government faces a wide variety of risks. Universally recognized hazards include physical damage to owned assets like buildings, machinery, equipment, supplies, vehicles, etc. Others include liability imposed by the operation of city or county services, acts or omissions of employees and elected officials, injuries to employees, and the operation of automobiles. A less obvious risk is that of an interruption in business because of damage to offices—or less obvious yet, damage to the property of another party that is the single supplier of a necessary product.

When the risk manager has identified the risks in an organization, he must then measure them. The question becomes: "How much loss could result if a certain event occurs." The risk manager must be a pessimist—he looks for catastrophes. For example, if a city suffered a fire loss, the maximum loss that could result is the current replacement value of the building and its contents plus the extra expense of finding other facilities from which to operate.

Two basic forms of risk treatment are risk finance and risk control. Identifying and measuring a risk is like a doctor's diagnosing an ailment. The next logical step is to "treat" the risk, which is the most challenging part of risk management. The risk manager's inventiveness is tested by the methods he chooses to do that job.

Risk-control techniques include: avoidance—simply eliminating the hazardous activity; reduction—reducing the severity of losses that do occur; and prevention—reducing the possibility or frequency of losses. *Risk-financing* techniques include assumption and transfer. Assumption involves paying for losses with funds that originate within the organization, such as out of the operating budget or a reserve fund. Transfer involves paying for losses with funds external to the organization, like insurance.

All risks should be treated by control as well as by finance. For example, a city government that purchases workmen's compensation insurance should also strictly enforce safety procedures, since the insurance premium is based on the city's past loss history. Ignoring safety procedures would result in an unnecessarily high premium.

Good risk management strives to eliminate surprises. All potential losses should be identified and planned for. The cycle of review and evaluation helps insure that no surprises occur and enables the risk manager to examine how well risks are being managed.

The risk-management study

A risk-management study is like the risk-management process—i.e., losses are identified and measured and treatments are prescribed. In making risk-management studies for members of the Centralina Council of Governments, we have used a questionnaire (see Exhibit 1) to identify hazards and to elicit other information on the local governments' structure, assets, liabilities, and operations.[1]

When we do a study for a COG member, we supplement the questionnaire by visiting its facilities. That helps us to detect unsafe conditions, unusual circumstances, or costly equipment that needs to be insured. For example, one city had many pieces of expensive equipment like tractors, front-end loaders, and air compressors that were not insured. Without visiting the public works yard, we would not have known that the city owned the equipment. In another city an organization of churches was using a city-owned building to distribute clothes and other materials to the needy. But the city had not drawn up a lease agreement with the organization and thereby ran the risk of liability. For example, the organization could have caused a fire that destroyed both that building and an adjoining building and killed or injured people. The city could have been held liable, since it owned the building and had not required the organization to hold the city harmless and to carry general liability insurance in a lease agreement.

Other methods of identifying loss also can be used. These include "logical classification" (which is an exhaustive listing of loss possibilities), analysis of financial statements, and the flow charts that trace the unit's operations from the procurement of supplies, equipment, money, etc., to the delivery of services.

Once the risks are identified, they must be measured. One way to do this is to analyze a three-to-five-year loss history. A loss history records the date and amount of the loss and briefly describes it. Knowing the frequency and severity of risk is very helpful in deciding on a risk-management treatment. Say, for example, that collision losses on automobiles are not very frequent or severe. The fact may suggest that it would be more cost effective to establish a reserve fund to cover losses than to pay insurance premiums. Analysis of a loss history indicates the "normal" trend of losses and does not usually show catastrophic claims since these are so rare. But the risk manager must be aware that catastrophic losses do occur and must plan for them.

Once exposures have been identified and measured, the next step is to devise appropriate risk-treatment strategies. To do this the risk manager analyzes the existing risk-management system and

Exhibit 1

Major points of a Risk Analysis Questionnaire

I. General Risk Management System in Existence
   - A. Risk Management Policy Statement
   - B. Risk Management Organization

II. Crime Exposures
   - A. Dollar Amount of Exposure
   - B. Security Systems Used

III. Property Exposures
   - A. Valuable Papers and Records Security and Duplication
   - B. Extent of Property Records
   - C. Extent of Property Risk-Reduction Systems
   - D. Dollar Amount of Property Exposures (Buildings, Contents, Equipment and Vehicles)

IV. Liability Exposures
   - A. List of Operations and Programs

V. Exposure Reduction and Prevention
   - A. Extent of Safety and Loss Control Programs

1. To assist its members in Region F, the Centralina Council of Governments began preparing risk-management studies in June of 1979, with help from the executive director of the Charlotte-Mecklenburg insurance and risk management agency. Thus far studies have been completed for Gastonia, Lincolnton, Lincoln County, Statesville, Mooresville, Iredell County, Salisbury, Landis, Rowan County, Concord, Monroe, Union County, Mount Holly, and Bessemer City. Region F comprises Mecklenburg, Union, Stanly, Cabarrus, Rowan, Iredell, Lincoln, and Gaston counties and forty-three municipalities located therein.

recommends improvements, which may include review of insurance policies; review of all leases, contracts, agreements; and analysis of assumption and reduction mechanisms.

Insurance policies are reviewed not only to assure proper types of coverage in the proper amounts but also to assure that the policy itself is written on the proper form with the proper endorsements. Equally important, insurance policies are checked to be sure that they do not contain improper endorsements (endorsements are provisions added to an insurance policy that alter its scope or application), which can severely limit coverage. In regard to property, replacement values are computed on the basis of the number of square feet for the buildings and contents. Buildings are usually underinsured.

Legal agreements are reviewed in order to find out whether the unit is assuming liabilities that it should not. For example, in a law enforcement mutual-aid agreement whereby each party agrees to provide assistance in emergencies, the sending party should be held harmless (that is, relieved of liability) by the requesting party. Leases and contracts should contain an insurance paragraph that prescribes the proper coverages. A word of caution: Review of contracts by an attorney does not obviate the need for risk-management review because few attorneys have risk-management and insurance skills.

Finally, all assumption and reduction mechanisms are analyzed. Safety procedures may prove to be inadequate or nonexistent. The unit may need to consider changing its insurance policies to make a certain amount of loss deductible in order to reduce insurance premiums, or it may decide to insure itself in some areas. On the other hand, inadequate self-insurance may need to be replaced by insurance.

Depending on the size of the unit and other variables, such as the availability of information, a risk-management study takes two to four weeks—about one week in the field doing research and the rest of the time in evaluation and writing the report.

Common risk-management problems

Our experience indicates that certain problems are very common in risk management. These problems and recommended solutions are listed below. It should be noted that each local government has unique situations that require special attention and therefore needs an individualized in-depth study.

Local governments' risk-management problems fall into three categories—risk reduction, risk assumption, and risk transfer.

Reduction. Most local governments do not actively and effectively pursue loss-reduction programs. Records of losses should be kept and goals to reduce losses should be set on a departmental basis. Also, an accident review committee composed of both top administrators and line personnel should be established to seek the causes of accidents and recommend preventive measures. Other loss-reduction measures include (1) checking driving records for all personnel who may drive on local government business (for new personnel, this should be done before employment; people with poor driving records should not be hired if the position requires frequent operation of vehicles and equipment; (2) inspection of government properties and work habits to discover any fire hazards, liability hazards, theft exposures, etc.; and (3) pre-employment physicals for all policemen, firemen, and laborers.

The local government should also call on its insurance company to provide loss-reduction services. Insurance companies employ safety engineers whose services are paid for by premiums.

Assumption. The most common method of handling risk is simply to assume it. Many local governments do this passively—that is, they have risks that have not been identified, measured, and properly treated. Prudent risk management dictates that passive assumption be eliminated. Local governments that rely on an insurance agent most heavily are passively assuming many risks, since not all hazards are insurable. A better policy is to identify hazards that are not insured and set up a proper way to cover uninsured losses. Such losses may be safely absorbed as an operating expense or, preferably, paid out of a small reserve fund.

The fact that a risk is insurable does not of itself mean that transferring it to an insurance company is the best treatment. The risks that present the potential for catastrophe should be insured and the others should be assumed. An insurance policy with a deductible clause enables assumption of small claims while providing protection for the more severe claims. A local government should consider various amounts of loss that it could accept as deductible in order to achieve a proper balance between insured and assumed losses. The proper balance is determined by analyzing the loss history.

Transfer. The burden of risk may be transferred from one party to another either through legal agreement (leases and contracts) or through insurance.

Legal agreements. A local government's leases and contracts are not reviewed from a risk-management perspective, and they may not contain some critical

items. A risk-management review of legal agreements should cover four areas: (1) "hold-harmless" agreements, (2) insurance requirements, (3) waiver of subrogation agreements, and (4) verbal agreements.

Hold-harmless agreements. The basic method for transferring liability risk is through the hold-harmless agreement. A hold-harmless agreement is a contract provision by which one party relieves another party of liability or responsibility for a claim or loss, thereby making itself liable for the acts of the second party. For example, if a private firm leases a building from a city and the city inserts a hold-harmless clause into the lease agreement, the private firm must pay for the defense and settlement of any third-party liability claims for judgments against the city in connection with the leased premises. All local governmental leases or contracts should contain and spell out a hold-harmless agreement.

Insurance requirements. When the hold-harmless agreement is included, insurance requirements are sometimes not specified. Although a hold-harmless agreement does transfer risk to another party, it is only as good as the financial solvency of the party that holds the local government harmless. Therefore the lease or contract should always require the party that holds the unit harmless to carry general liability insurance. But because a general liability policy excludes claims in connection with fulfillment of a contract, a contractual coverage endorsement should be required. Leases, right-of-way agreements (except in connection to construction or repair operations on or adjacent to a railroad), and elevator maintenance agreements are defined as "incidental" by the general liability policy and are covered under the basic policy without a contractual coverage endorsement. Also, the lease or contract should require that a certificate of insurance advising that the proper coverages are carried be furnished to the unit.

In addition to the foregoing liability insurance requirements, agreements to lease buildings should contain the property insurance requirements. Such an agreement should require each party to insure its own property to its full insurable value.

Waivers of subrogation. Building lease agreements also need a waiver of subrogation. Under a standard insurance policy the insured party subrogates its rights of recovery from the negligent party to the insurance company when a claim is filed after a loss. For example, if a fire occurs because of local governmental negligence, the other party's property insurance company could sue the unit for the amount paid out to the insured unless it and the other party signed a waiver of subrogation before the loss. We have rarely found a waiver of subrogation agreement in a building lease—an absence that signifies a substantial potential for loss.

Verbal agreements. However honorable people may be, if a substantial claim arises in connection with an agreement, it is helpful to have the agreement in writing for settlement purposes.

Potential for loss is high in connection with new-construction contracts and purchase orders. If new-construction contracts specify that the local government always carry the builder's risk insurance, considerable money can be saved. The contractor will be unable to include the cost of the builder's risk insurance as a cost to be recouped under the contract, and thus there will be no contractor's mark-up on the insurance (which could run up to 30 per cent added to the actual premium). Also, if the project is completed before the policy expires, the local government—not the contractor—receives the premium refund. Purchase orders should contain terms and conditions that protect the jurisdiction from claims arising out of defective goods, goods not delivered on time, and the shipment of goods.

All legal agreements should be reviewed from a risk-management perspective before they are executed to assure that the local unit is not assuming a risk of liability that should be transferred to a second party.

Insurance. An insurance policy is merely a contract for the transfer of risk to a professional risk-bearer. But risks should not always be transferred to an insurance company—coverage may be unavailable or too expensive, or an assumption program may be more practical. A decision to purchase insurance rather than consciously to accept losses should be based on a careful analysis of the probable severity and frequency of certain risks and the unit's financial capacity. However, since most small and medium-sized local governments do not actively monitor and analyze their loss experience—and in fact do not have the in-house expertise to do so—insurance becomes the most common way to treat risks. Problems commonly found in a local government's insurance program are as follows:

Property insurance. Many local governments insure their buildings with a co-insurance type of policy that requires the unit to update building values continually as the values rise. Without such an updating, the insurance payment for a loss would pay only a percentage of that loss—i.e., the unit would face a loss for which it had not adequately planned. Instead of co-insurance, blanket coverage can be purchased that allows the jurisdiction to recover the sum total of all building values for the loss of a single building.

Property coverages can be written under a variety of forms at a variety of premiums. Substantial savings can be realized if a jurisdiction does not insure its property under a public and institutional property form.

Property insurance should include replacement-cost coverage and "all-risk" coverage. Replacement-cost coverage pays the full cost of replacement at current market prices and is preferable to actual-cash-value coverage, which pays replacement cost less depreciation. All-risk coverage provides for a broad range of possible catastrophies and is preferable to "named-perils" coverage, which specifically lists the calamities covered, such as fire, lightning, vandalism, etc. Although replacement-cost coverage and all-risk coverage are more expensive than other types, they provide much better protection.

General liability insurance. For protection against general liability, most local governments carry the basic bodily injury and property-damage coverage. General liability insurance should be expanded to include coverage that will cover (1) products (that is, anything made or used by the local government to apply to a person or property), (2) employees as additional insureds (this type of coverage insures the individual employees as well as the local government), (3) personal injury (this type insures against libel, slander, false arrest, defamation of character, etc.), (4) waiver of governmental immunity (prevents the insurance company from refusing to pay a claim on the basis of governmental immunity), and (5) contracts.

General liability policies very often include endorsements that exclude coverage of claims arising from (a) operation of a public utility, (b) construction or repair of roads, and (c) injury to persons held in a jail. Either these endorsements should be removed from the policy to cover claims in connection with these exposures or an alternative risk-financing plan should be used.

The general liability policy's coverage limit is sometimes low. Recent court verdicts and settlements suggest that the limit should be at least $500,000 for bodily injury and $100,000 for property damage.

The property and general liability coverage should be written under a commercial package policy (previously known as "special multi-perils"). In the commercial package, the property and liability coverages are "packaged" to achieve cost savings of 15 to 20 per cent. Other coverages such as blanket bond (which covers losses caused by employees), "broad form money and securities" (which provides all-risks protection on money, securities, checks, etc.), and boiler and machinery (which covers the explosion hazard excluded under the property policy) can be placed in the commercial package policy.

Automobile insurance. Local governments' automobile liability coverage should always include certain additional coverages—such as for medical payments for injuries incurred in accidents involving administrative cars and for damage to hired and leased cars. We also recommend that units drop uninsured-motorists coverage if they carry it, because the risk is so small. Still, because the price of uninsured-motorists coverage is low, not all units that we have worked with have followed this advice.

A local unit should assume the risk of collision only if its fleet contains 40 automobiles or more; otherwise it should carry both collision and comprehensive insurance. The only comprehensive coverage that all units should carry is fire, especially if vehicles are garaged at a central location.

Some governments cover their contractors' heavy equipment for comprehensive perils under their automobile policy. Actually, contractors' equipment can be covered in two ways. One way, as mentioned, is under the automobile policy; another way is under an inland marine contractors' equipment policy. The inland marine policy covers all risks and thus provides a broader base of coverage, but the protection provided under the automobile policy may be much cheaper. If contractors' equipment is covered under the automobile policy, it should be covered for fire and theft only and not for liability. This equipment is automatically covered for liability under the general liability policy.

Blanket bond. Four options—known as Agreements 1, 2, 3, and 4—are available in purchasing a blanket bond. (A blanket bond is coverage either against dishonest acts or to assure faithful performance; it provides for payment of claims on either a per-employee basis or a per-occurrence basis.) We recommend Agreement 3 for two reasons. First, it pays on the basis of faithful performance, whereas Agreements 1 and 2 pay only for dishonest acts. Second, Agreement 3 pays on a per-occurrence basis, whereas Agreements 2 and 4 pay on a per-employee basis. Payment on a per-occurrence basis is cheaper than payment on a per-employee basis, and also the jurisdiction need not prove that a specific employee caused the loss.

Individual bonds. Individual bonds should be carried only on those employees who are required by law to be bonded. All other employees should be covered under the blanket bond. Those positions that are required by law to be bonded include the tax collector, the finance director, the register of deeds, and the sheriff.

Workers' compensation insurance. It may be advantageous to add some endorsements to the standard workers' compensation policy, including the all-states endorsement (which provides coverage should a loss occur in another state with different workmen's compensation laws), the volunteers' endorsement (which provides coverage for volunteers), and the longshoremen and harbor workers' endorsement (which provides coverage for claims for connection with navigable waters). Also, it may be advisable to join a workers' compensation pool. By pooling risks and jointly purchasing extra insurance to cover catastrophic losses, savings can be achieved. Pools are offered by both the North Carolina League of Municipalities and the North Carolina Association of County Commissioners. By joining a pool, a local government can save 15 per cent of what would otherwise be paid in premiums. The sponsoring agency (League or Association) purchases the extra (excess) insurance.

Umbrella insurance. Smaller governments rarely carry "umbrella" or extra liability insurance. Still, they too are susceptible to catastrophic claims and should have this insurance. Umbrella insurance supplements the basic underlying coverages (i.e., auto liability, general liability, workers' compensation, etc.); its purpose is to extend the limits of the underlying policies and to provide protection against otherwise not covered, undiscovered, and/or unknown risks. This type of policy offers a way to transfer catastrophic claims. The minimum amount of coverage is $1,000,000, and a sizable deductible—such as $10,000—is required.

Boiler and machinery insurance. Boiler and machinery insurance protects against the risk of explosion of steam boilers, and it is very advisable. In addition to the coverage, carriers of boiler insurance provide excellent loss-prevention services as well as inspections on water heaters. The state requires that water heaters be inspected, and the cost of boiler insurance is not much more than the inspection cost.

Inland marine insurance. Inland marine policies provide all-risks coverage to highly mobile and/or expensive equipment. Items like construction and radio equipment and fine art are commonly insured in this way. A local unit can usually cut its insurance cost by accepting a certain amount in loss as deductible. Also, some equipment—water tanks, for example—need not be insured because the risk of loss in connection with it is too small to warrant the policy.

Conclusion

Many local governments, especially small ones, do not have the resources to develop a good risk-management system on their own, but every local unit needs to manage risks systematically. Sound risk management can be achieved in several ways—for example, (1) creating a combined city-county risk-management department, (2) forming a risk-management program in cooperation with several other local governments, (3) establishing a risk-management service in the local council of governments, and (4) retaining a professional risk-management consultant. Deciding which approach to take is less important than deciding to undertake the program. ■

Farmers Home Administration Financing of Community Facilities in North Carolina

Harlan E. Boyles and A. John Vogt

FmHA's program to assist in rural development has had outstanding success in North Carolina. What does it do? And why has it succeeded so well? What does the future hold for this program?

FARMERS HOME ADMINISTRATION (FmHA) is a federal agency of the U.S. government that makes loans and grants to counties, to small municipalities, and to other public bodies or private nonprofit organizations for developing community facilities in small towns and rural areas. These loans and grants are used to construct or acquire water supply and waste disposal systems, fire-fighting equipment and facilities, schools, hospitals and medical clinics, group homes and sheltered workshops, government office buildings, and other community facilities. To this point, all loans have been made at a 5 per cent interest rate and have repayment periods that extend up to 40 years.[1]

North Carolina's FmHA community facility programs are among the largest in the nation. The greatest share of FmHA money for these programs has been spent for rural water supply and waste disposal systems. From 1972 through 1979, loans of $277.5 million were approved for developing such systems in North Carolina (Table 1). North Carolina has received more money for water supply and waste disposal than all but two other states.[2] In 1974, FmHA began lending money for developing community facilities other than water supply and waste disposal. From 1974 through 1979, North Carolina received more loan funds ($71.1 million) for these other community facilities than any other state (see Table 1). This amount represents a phenomenal 17 per cent of the total number of FmHA loans made nationwide for such facilities.[3]

This article summarizes the history of FmHA and its present major programs and then describes its community facility programs in North Carolina. It looks at the magnitude and growth of these programs in the state, the different types of facilities built or acquired under the community facilities programs, eligibility requirements for FmHA community facility loans and grants, the distribution of FmHA community facility funds by county, and different views about FmHA's community facility programs in North Carolina. The article concludes by considering what the future holds for FmHA's community facility progams, nationally and in North Carolina.

What is FmHA?

The Farmers Home Administration is a farm credit and rural development agency in the U.S. Department of Agriculture.[4] First called the Resettlement Administration, FmHA was created in 1935 to make short-term loans to low-income farm families to help them become self-supporting. In 1937, renamed the Farm Security Adminis-

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1. See FmHA Instructions 1942-A and 1942-H. Under an FmHA procedure notice, dated January 14, 1981, municipalities with 20,000 people or less are eligible for FmHA loans for the development of community facilities other than water supply and waste disposal projects. Previously municipalities with only 10,000 people or less could receive FmHA loans for such facilities. To be eligible for a loan or grant for a water supply or waste disposal project, a municipality's population cannot exceed 10,000.

2. Oklahoma and Texas. This information was supplied by the Public Information Office, Farmers Home Administration, Washington, D.C.

3. *Ibid.*

4. Most of the information in this section was condensed from a *Brief History of the Farmers Home Administration*, February, 1979 (Washington, D.C.: U.S. Government Printing Office, 1979-624-028/926).

Table 1

Farmers Home Administration Financing of Community Facilities in North Carolina, Dollar Amount of Loans and Grants Approved 1972-79 ($ in millions)

Year	Water and Waste Disposal Systems			Other Community Facilities	Industrial Development	All FmHA Loans and Grants for Community Facilities		
	Loans[a]	Grants	Loans and Grants	Loans	Grants	Loans	Grants	Total
1972	$ 9.7	$ 1.4	$ 11.1	-	-	$ 9.7	$ 1.4	$ 11.1
1973	16.7	1.1	17.8	-	-	16.7	1.1	17.8
1974	26.0	1.2	27.2	$ 3.3	$ .4	29.3	1.6	30.9
1975	27.7	6.4	34.1	13.5	.6	41.2	7.0	48.2
1976[b]	32.6	16.4	49.0	19.0	.8	51.6	17.2	68.8
1977	35.1	15.0	50.1	10.9	.6	46.0	15.6	61.6
1978	29.1	11.1	40.2	13.0	.6	42.1	11.7	53.8
1979	34.7	13.3	48.0	11.4	.8	46.1	14.1	60.2
Totals	$211.6	$65.9	$277.5	$71.1	$3.8	$282.7	$69.7	$352.4

Source: FmHA community facility loan and grant records, FmHA office, Raleigh, North Carolina.

a. Includes watershed loans of $250,000 in 1976 and $222,000 in 1977.

b. This is for a 15-month fiscal year from July 1, 1975, to September 30, 1976. The federal government changed from July 1-June 30 to an October 1-September 30 fiscal year in 1976. On a 12-month basis, about $55 million of loans and grants were awarded in 1976.

tration, it began offering 40-year loans to farmers for acquiring land, making farm improvements, and (in 17 western states) developing farm water systems. In 1947 the agency became the Farmers Home Administration. It continued the same farm development loan programs but also began to make short-term loans for farm operations. Through the 1950s, FmHA concentrated on providing credit to farmers; by 1960 its loan volume was $300 million. But over the last twenty years, FmHA has been transformed from a strictly farm credit agency to a full-scale rural development agency. By 1965, it was providing $750 million in loans and grants for farming, housing, and water supply and waste disposal systems in rural areas across the nation. With the passage of the Rural Development Act of 1972, FmHA programs expanded broadly. That act authorized FmHA to guarantee loans by commercial lenders for farming, housing, and industrial development in rural areas, and it permitted FmHA to make loans for community facilities other than water supply and waste disposal. By 1978 total FmHA loans, grants, and insured loans had reached $11 billion. Because of large disaster and economic relief loans for farming, they jumped to $14.6 billion in 1979.[5]

There are four major FmHA programs today (*Summer 1981*).

1. *Farm ownership, improvement, operation, and emergency relief.* Nationwide, these programs provided $7.7 billion in loans to farmers in 1979; almost $6 billion of this amount went for emergency relief loans. FmHA loans in North Carolina under these farm programs totaled $234 million in 1979.

2. *Financing of rural housing.* Nationwide FmHA insured and subsidized $3.8 billion in loans under these programs in 1979. Two-thirds of this amount went to low and moderate income families in owner-occupied housing in rural areas, defined to include municipalities of not more than 20,000 people. These loans extend for up to 33 years at subsidized interest rates that are based on family income. The remaining third was for rental housing for the elderly and for low to moderate income families in rural areas, defined in this case to include towns of not more than 10,000 people. Rental housing loans are made for terms of up to 50 years, again at subsidized interest rates that depend on family income. FmHA's insured loans for rural housing in North Carolina were $197 million in 1979—by far the largest FmHA housing program in the nation. (Mississippi and New York came next—about $100 million each.)

3. *Guaranteed loans for business and industrial development.* Under this program, FmHA guarantees 90 per cent of a commercial loan to a private business or industry located in a rural area or in a nonmetropolitan town or city with 50,000 people or less. In 1979, FmHA guaranteed 1,609 such loans, which totaled $1.2 billion nationally. In North Carolina that year, FmHA guaranteed 105 business and industrial development loans that totaled $63.5 million. Only Oklahoma had more loans (165), and only Louisana had a greater dollar amount ($69.7 million) in 1979.

5. The 1979 figures here and below for FmHA loans, grants, and insured loans came from the Public Information Office, Farmers Home Administration, Washington, D.C.

4. *Community facilities.* FmHA community facility programs provide loans and grants for water supply and waste disposal systems, loans for other community facilities, and industrial development grants.[6] The dollar amounts obligated in these programs nationwide and in North Carolina in 1979 were:[7]

	Nation	North Carolina
Water and waste disposal	$1,190,700,000	$47,963,100
Other community facilities	247,000,000	11,358,000
Industrial development	10,000,000	$13,900

FmHA community facility programs in North Carolina

Table 1 shows that the dollar amount of FmHA loans and grants for community facilities in North Carolina grew dramatically in the early and mid-1970s and then leveled off. The earlier growth occurred because Congress expanded the scope of the FmHA community facility programs, liberalized eligibility criteria, and increased funding for the programs. Nationwide, FmHA loans for water supply and waste disposal grew from $299.9 million in 1972 to $749.9 million in 1978, while the loans for other community facilities increased from $49.8 million in 1974 to $249.9 million in 1978.[5] The Rural Development Act of 1972, besides permitting loans for community facilities other than water supply and waste disposal, made municipalities with from 5,500 to 10,000 people eligible for community facility loans and grants. Previously only municipalities with 5,500 or fewer people were eligible.[9]

The leveling off of FmHA loans and grants for community facilities in North Carolina in recent years—at $50 million to $60 million annually—is attributable to a similar occurrence at the national level. For example, although obligated loans for water supply and waste grew nationally from $749 million in 1978 to $899 million in 1979, they were only $700 million in 1980.[10] Obligated grants for water supply and waste disposal nationally were $303.9 million in 1978, $292 million in 1979, and $300 million in 1980. Obligated loans for other community facilities were $250 million in 1978, $247 million in 1979, and $240 million in 1980.

Although the amount of FmHA community facility money coming into North Carolina has not grown in recent years, the fact that the state has received $50 million to $60 million annually has placed North Carolina at or near the top among the states in FmHA financing for such facilities. Why has North Carolina done so well and continued to do so well in capturing FmHA money for community facilities? First, it is a very rural state. Census figures for 1970 show that only Pennsylvania has more people living in rural areas than North Carolina. The Census Bureau defines a rural area as any incorporated or unincorporated community with a population under 2,500, plus people in scattered individual dwellings. In 1970, 2.8 million of North Carolina's 5.1 million people lived in rural areas.[11] The growth and settlement patterns in North Carolina during the 1970s suggest that we are still one of the most rural states in the nation.[12] Second, the FmHA programs in this state have had energetic leadership. FmHA officials here have sought new projects and different ways of putting FmHA community facility money to use. For example, FmHA loans for rural fire protection and for group homes for the handicapped were pioneered in North Carolina. North Carolina FmHA officials also try to approve as many loans and grants as possible in the first part of the fiscal year, a practice that has assured full use of the state's initial allocation and enabled North Carolina to draw on FmHA's national pool and other states' allocations for community facilities. FmHA officials here also have established close working relationships with state officials who are concerned with rural development, so that the two groups working together have been able to change state policies to permit new types of projects to be funded.

Types of FmHA – financed community facilities

Table 2 shows FmHA loans and grants for community facilities in North Carolina by type of facility for 1972 through 1979.

Until 1974 *water supply and waste disposal projects* were the only types of projects financed by FmHA, and they still absorb about three-fourths of FmHA's community facility money.

Water supply has been and still is the largest FmHA community facility program in North Carolina. Of a total of $50.1 million (Table 1) lent for water supply and waste disposal in 1977, $35.6 million went for *strictly* water projects. This amount dropped to $26.1 million in 1978 and $24.7 million in 1979.[13] FmHA money for *strictly* waste disposal projects also

6. Industrial development grants can be made to communities with 25,000 people or fewer.

7. The nationwide figures were supplied by the Public Information Office, Farmers Home Administration, Washington, D.C. The North Carolina figures were calculated from FmHA loan and grant records, FmHA office, Raleigh, North Carolina.

8. *Op. cit. supra* note 4, tables.

9. *Ibid.*, pp. 4, 6-7.

10. Source for the 1978 figures in this paragraph: *ibid.*, for the 1979 and 1980 figures: Public Information Office, Farmers Home Administration, Washington, D.C.

11. U.S. Bureau of Census, *Census of Housing, 1970*, vol. 1, *Housing Characteristics for States, Cities, and Counties, Part 35, North Carolina* (Washington: GPO, 1972).

12. 1980 Census breakdowns of state populations into urban and rural categories were not available when this article was written.

13. These breakdowns of water supply and waste disposal totals into strictly water, strictly sewer, and combined water and sewer projects were supplied by the Public Information Office, Farmers Home Administration, Washington, D.C.

declined during these years from $12.9 million in 1977, to $8.7 million in 1978, and to $4.7 million in 1979. These declines in FmHA funding for strictly water and strictly waste disposal projects were offset by the growth in FmHA funding for *combined* water supply and waste disposal projects. The funding for these projects grew from $1.6 million in 1977, to $5.4 million in 1978, and to $18.6 million in 1979. Financing for waste disposal accounts for about 60 per cent of the total allocation for combined water supply and waste disposal projects. This percentage for 1979 suggests that waste disposal improvements accounted for about $16 million ($4.7 million plus 60 per cent of $18.6 million), or one-third of total FmHA-approved funding for water supply and waste disposal projects in the state that year. Water supply improvements absorbed the rest.

FmHA has pursued two objectives since 1970 in making loans and grants for water projects in North Carolina. One has been to expand the existing water systems rather than create new smaller systems. The larger water systems are more viable economically than the smaller ones. The other objective has been to encourage local public bodies, particularly counties, to take over private nonprofit water systems and to start new water systems where needed to serve rural residents. The public water systems tend to be larger, more stable, and less risky as investments than most private systems. About a fourth of North Carolina's counties now operate public water systems, and most of them started with FmHA encouragement and financing. Most FmHA loans and grants for water supply in North Carolina now go to public bodies. For every FmHA dollar approved for private water systems, $7 to $8 are approved for public water systems—the reverse of the situation that prevailed in the 1960s.

Most FmHA *waste disposal* loans and grants in North Carolina are made to small towns and cities for sewer improvements. These improvements enable a municipality to extend or improve sewer services to its residents, extend public sewer services to nearby rural residents, or extend sewer lines and service to another nearby small community that does not have a public sewer system. FmHA also has made waste disposal loans and grants to several sanitary districts, to a metropolitan sewer district, and to Moore County, where several small towns participate in a county-administered sewer and waste disposal system.

Table 2

FmHA-Approved Loans and Grants for Community Facilities in North Carolina by Type of Facility, 1972-79 ($ in Millions)

Type of Project	Loans and Grants: Number	Loans and Grants: Amount
Water, wastewater, and solid waste disposal	636	$277.5
Fire	309	18.0
Schools	10	19.7
Hospitals and health facilities	30	22.0
Group homes and sheltered workshops	20	4.0
Local government office buildings	5	3.5
Industrial development	71	3.8
Other[a]	18	3.9
TOTALS	**1,099**	**$352.4**

Source: Loan and grant records, FmHA community facilities program, FmHA office Raleigh, N.C.

a. Other consists of ten community centers, several recreation projects, two urban renewal projects, a public works garage, a data processing project, a streets project, a watershed project, and a railroad project.

Because FmHA must make sure that any water supply or waste disposal project to which it lends money will be self-supporting, it conducts its own economic feasibility study before making such a loan. In the study, FmHA verifies that the project or system will have enough users, that monthly user charges are affordable to the users, and that these revenues are enough to pay operating and maintenance costs and annual debt service.

FmHA loans for water supply and waste disposal projects have been made at a 5 per cent interest rate and with repayment terms that extend to 40 years. They are made to public bodies and private nonprofit agencies that cannot obtain financing at reasonable (i.e., affordable to the prospective users) rates and terms from the private sector. FmHA's low interest rate and long repayment terms keep debt service costs—and therefore users charges low enough to be affordable; if the fees are not low enough, FmHA can substitute a grant for part of the loan, thus reducing debt service costs even more.

Solid waste disposal accounts for a small yet significant sum of money included in the FmHA loan and grant total for water supply and waste disposal shown in Table 2. This sum is mostly made up of grants that went to 27 North Carolina counties in the early 1970s to purchase green box disposal units, landfill sites, and equipment.[14] Relatively small in amounts ($15,000 to $50,000), these grants were matched by larger financial contributions from the counties. FmHA stopped funding solid waste disposal projects in North Carolina in 1974 because of changes in grant priorities and procedures.

FmHA's financing of equipment and facilities for *rural fire protection* has been one of its most successful programs in North Carolina. At one time the volunteer fire departments that served rural areas used mostly secondhand equipment and operated out of buildings that were not designed for fire-fighting companies. At the same time, many rural areas were undergo-

Rolesville Fire Department.

14. FmHA community facility officials, FmHA Office, Raleigh, North Carolina.

ing industrial and residential development and needed better fire protection. FmHA began making loans to volunteer fire departments so that they could buy the equipment and build the facilities needed to provide better fire protection.

FmHA has made more than 50 loans amounting to about $3 million a year under this program—all to volunteer fire departments. About three-quarters of the funds is used to buy fire trucks and equipment, and the rest is used to build or renovate fire stations. The loans have been made at 5 per cent interest and have a term of 20 years for equipment and 20 to 30 years for buildings. Generally, to obtain such a loan, a volunteer department must have a contract with a county or town in which the governmental unit agrees to contribute fire district or general tax money to the department to pay annual debt service on the loan if private contributions do not cover these payments. This requirement can be waived for departments that receive substantial private contributions. Volunteer departments also must show that they cannot obtain a loan from the private sector at reasonable rates and terms.

FmHA approved $19.7 million in loans for *local school projects* in North Carolina from 1974 through 1979. These loans, made to counties that have low credit ratings, have a 5 per cent interest rate and a repayment term of 40 years.

Orange County Family Medical Center.

North Carolina hospitals and health care facilities have received $22 million in approved FmHA loans since 1974—about $15 million to county hospitals, $4 million to private nonprofit hospitals, and $3 million to private nonprofit medical clinics that serve the public in small towns or rural areas. Most FmHA financing for county hospitals was in revenue bonds secured by user fees rather than general-obligation or tax-secured bonds. To receive FmHA financing, the hospitals had to be either unable to get private financing or able to get it only at terms that would raise the annual debt service on the bonds so high that hospital fees would have been forced significantly above usual and customary charges. All FmHA loans to hospitals have been at 5 per cent interest rate over 40 years.

FmHA *loans to medical clinics* have carried a 5 per cent interest rate over a 20- to 30-year period. Debt service on the loans is paid from the rent charged to the doctors who use the clinics and ultimately from charges to the clinics' patients. Many patients are poor, and Medicaid pays the costs for their medical care. When it is expected that Medicaid and patient charges will not cover the annual costs of an FmHA-financed clinic, the U.S. Department of Health and Human Services guarantees the loan.

FmHA has approved $4 million in loans since 1974 for *group homes for the elderly* and *group homes and sheltered workshops* for the mentally retarded, physically handicapped, and emotionally disturbed — all to private, nonprofit organizations. These loans have been at 5 per cent interest over 20 to 30 years. To qualify for a loan, an agency must show that it cannot obtain credit at reasonable terms in the private market. FmHA's security for the loans is a deed of trust and assignment of the Supplemental Security Income, Medicare, Medicaid, and other payments that residents in these homes receive. Like the FmHA program for rural fire protection, this one has received national recognition. The program began in North Carolina, and it is now spreading to other states.

FmHA has lent money to five small municipalities in North Carolina to construct and renovate *town office buildings and other municipal facilities.* All of these loans have a 5 per cent interest rate and a 40-year repayment term. These towns qualified for FmHA financing because they were borderline credit risks and could not obtain loans from the private sector at affordable rates and terms.

Garner Public Library.

Table 1 shows that FmHA's *industrial development grant program* is much smaller than either its water supply and waste disposal program or its program for other community facilities. FmHA has made about twelve industrial development grants a year, which have gone to local governments for extending water and occasionally sewer lines to specific industries. The grants are intended to retain local industry and jobs or to attract new industry and jobs to the community.

FmHA has lent money for many *other types of community facilities* since 1974—for community and recreation centers, urban renewal projects, a public works garage, street improvements, data processing equipment, and other projects. These FmHA loans for "other" facilities have a 5 per cent interest rate and repayment terms from 25 to 40 years, depending on the type of facility built.

Who receives FmHA financing?

FmHA regulations specify that community facilities financed by FmHA shall primarily serve rural residents, defined as people who live in unincorporated areas and in municipalities with 10,000 or fewer people in the case of water-supply and waste-disposal projects and 20,000 people or less for other community facility projects, according to the latest U.S. Census.[15] Until January of this year municipalities with more than 10,000 people were not eligible for FmHA loans and grants for other community facilities.

15. The eligibility criteria and priorities for FmHA loans and grants are set forth in FmHA Instructions 1942-A and 1942-H.

FmHA-financed facilities can be located in municipalities that exceed these population limits as long as the portion of the facility that is financed with FmHA money serves only rural residents.

FmHA community facility loans and grants can be made to either public bodies or private nonprofit organizations. A private nonprofit organization must have significant ties with the rural community, and the facility being financed must be available to the public. The organization should also have broadly based ownership and control by members of the community and should receive substantial public funding or voluntary contributions from the community.

FmHA regulations also specify priorities among eligible applicants and projects. Public bodies have priority over private nonprofit organizations. Projects in communities with large low-income populations have priority over those in wealthier communities, and projects that fulfill state development strategies are preferred over those that do not. Priority is given to water supply and waste disposal projects that bring a community into compliance with the U.S. Safe Drinking Water Act and EPA regulations; serve rural communities that have both a population of 5,500 or less and an existing but inadequate water supply or waste disposal system; enlarge a system to serve more rural residents; or merge smaller water supply or waste disposal systems. Among "other community facilities," the regulations favor projects that serve the largest number of rural people, and they specify the following order of priority assigned to various types of projects from high to low: public safety, medical care excluding hospitals, courthouses and community buildings, recreation, hospitals, and other.

The distribution of FmHA community facility loans and grants in North Carolina has complied rather fully with the regulations. Since 1970 most FmHA money for water supply and waste disposal projects in the state has gone to public bodies, primarily to enlarge existing systems or to merge systems or create larger systems from smaller ones. About two-thirds of FmHA's funding of "other community facilities" in North Carolina has gone to public bodies.[16] What size of jurisdiction receives this money? Usually the smaller eligible communities—i.e., those with 5,500 people or less. In 1977-78, 51 per cent of FmHA's community facilities money went to county governments; 13 per cent to private nonprofit organizations for facilities in small communities and rural areas; 25 per cent to towns with fewer than 1,500 people; 10 per cent to towns with from 1,500 to 4,999 people; and only 1 per cent to cities and towns with 5,000 to 10,000 people.[17] (One reason for FmHA's success in getting its loans and grants to the state's very small towns and communities is its district and county office system. FmHA has 12 district and 83 county offices throughout North Carolina.)

Which counties in North Carolina have received FmHA loans and grants for community facilities? Table 3 shows the total and per capita amounts of approved FmHA loans and grants for community facilities by county in North Carolina from 1972 through 1979. "County" here refers to all local governments and private nonprofit organizations in the county.

FmHA has funded community facilities in every North Carolina county since 1972. Approved funding ranges from a high of over $18 million in Davidson County to a low of $52,900 in Alleghany County. FmHA also has spread its loan and grant money widely across the state. Seventy-six counties received more than $1 million and 51 counties more than $2.5 million in FmHA community financing from 1972 through 1979. Counties in every part of the state captured large amounts of FmHA financing for community facilities.

There are also some notable concentrations of FmHA community facility money. For example, counties around the Albemarle and Pamlico sounds have received more FmHA money per capita than counties in any other part of the state. Brunswick, Onslow, and Carteret counties along the coast and Watauga, Buncombe, Madison, Avery, Ashe, Swain, and Mitchell counties in the mountains have received large amounts of these funds. Davidson, Union, Richmond, Stanly, Lincoln, Gaston, Cabarrus, Davie, and Cleveland counties in the southern Piedmont also have done very well.

Counties that have not received much FmHA community facility money include the metropolitan counties, several sparsely populated counties in the north-central Piedmont, and about a dozen rural or semirural counties scattered across the state.

Why have some counties received so much FmHA community facilities funding? Primarily because they have large rural populations and otherwise fit FmHA eligibility criteria better than others. For example, Davidson County has received more FmHA community facility money than any other; two-thirds of its 100,000 people live in unincorporated or rural areas.[18] Also, if a county is large in area and has many small towns with fewer than 10,000 people (like Brunswick, Pitt, and Sampson counties), its chances of receiving FmHA community facilities money are high. Counties that have started county water systems have received large amounts in FmHA loans and grants (this is why many of the counties on the Albemarle and Pamlico sounds rank so high per capita in Table 3). FmHA also has allocated considerable financing for water and sewer improvements and community facilities in the beach communities, many of which have had trouble obtaining private-sector financing for major capital projects.

There are varying reasons why certain counties have not captured much FmHA community facilities money. In some—like Mecklenburg, Forsyth, and Durham—most of the population lives in a large city, and neither the city it-

16. This breakdown is evident from Tables 1 and 2 and the preceding discussion.

17. North Carolina Department of Administration, *Report on Selected Federal Funds and Their Disbursement Patterns in North Carolina* (Raleigh, N.C.: March 8, 1979).

18. According to the North Carolina Department of Administration's *Population Estimates for North Carolina Counties and Municipalities, 1974*

Table 3

Per Capita and Total Approved FmHA Loans and Grants for Community Facilities by County in North Carolina Fiscal Years 1972-79

County	Per Capita Amount	Total Amount	County	Per Capita Amount	Total Amount
Davidson	$ 178	$18,250,200	Rockingham	34	$2,544,100
Dare	1,622	16,704,000	Cumberland	11	2,484,500
Brunswick	400	13,185,300	Transylvania	105	2,310,000
Onslow	105	12,086,000	Rutherford	41	2,112,500
Union	185	11,713,700	New Hanover	21	2,047,000
Randolph	134	11,119,600	Halifax	35	1,960,600
Pasquotank	344	9,893,000	Columbus	37	1,881,900
Pitt	115	9,209,200	Jones	192	1,821,500
Watauga	282	8,088,000	Camden	309	1,764,000
Richmond	182	7,599,500	Yancey	120	1,727,800
Harnett	136	7,545,300	Chatham	56	1,712,200
Stanly	163	7,313,000	Haywood	40	1,705,000
Sampson	149	7,287,200	Hyde	285	1,624,400
Stokes	232	6,786,500	Alamance	16	1,596,400
Wake	23	6,247,900	Martin	62	1,584,700
Lincoln	163	6,141,900	Iredell	20	1,573,400
Gaston	39	6,128,000	Guilford	5	1,529,000
Burke	95	6,041,000	Northampton	65	1,523,700
Caldwell	105	6,348,200	Tyrrell	395	1,502,000
Pamlico	574	5,627,000	Nash	22	1,437,100
Cabarrus	71	5,623,400	Macon	74	1,399,000
Wayne	60	5,434,100	Edgecombe	25	1,378,700
Carteret	141	5,247,000	Franklin	47	1,329,500
Catawba	49	4,919,300	Clay	237	1,328,000
Johnston	74	4,860,700	Robeson	14	1,327,300
Beaufort	120	4,719,000	Wilkes	24	1,296,000
Bladen	145	4,274,300	Yadkin	67	964,700
Greene	285	4,243,200	Montgomery	49	947,700
Davie	188	4,188,000	Alexander	42	937,000
Craven	59	4,034,900	Jackson	32	785,000
Hertford	164	3,971,700	Cherokee	43	749,400
Gates	470	3,902,000	Mecklenburg	2	651,500
Bertie	182	3,884,800	Graham	85	580,000
Duplin	95	3,832,600	Hoke	30	545,700
Person	136	3,710,000	McDowell	15	492,000
Moore	85	3,686,400	Surry	7	411,000
Cleveland	45	3,504,100	Forsyth	2	340,000
Washington	233	3,498,700	Henderson	6	300,000
Perquimans	398	3,461,000	Anson	11	253,300
Orange	50	3,442,200	Caswell	12	229,000
Chowan	293	3,425,000	Warren	12	207,000
Lenoir	57	3,418,200	Durham	1	196,000
Wilson	52	3,190,700	Rowan	2	175,000
Currituck	303	3,033,700	Pender	7	155,000
Buncombe	20	2,957,500	Granville	5	154,000
Madison	170	2,926,500	Vance	4	138,000
Avery	210	2,915,700	Lee	4	133,000
Ashe	144	2,913,000	Scotland	4	122,000
Swain	269	2,797,000	Polk	6	78,200
Mitchell	199	2,786,900	Alleghany	6	52,900

Source: The total amount of approved loans and grants by county were calculated from FmHA loan and grant records, FmHA Office, Raleigh, North Carolina. Per capita amounts were calculated by dividing the total amounts by 1977 population estimates for each county. These estimates came from the Research and Planning Service of the North Carolina Office of State Budget and Management.

self nor private organizations that serve the city's residents are eligible for FmHA loans or grants. Other counties like Alleghany and Caswell are so sparsely populated that county water systems are not feasible for them; furthermore, they have only one or a few small towns that otherwise can qualify for FmHA money. Lee and Scotland counties have received only about a $100,000 each in FmHA community facilities money—each is small in area, dominated by a city that is too large to be eligible for FmHA community facilities financing, and has only one or a few other communities that are eligible for such financing.

Views about FmHA

FmHA officials in North Carolina have worked hard to inform state and local officials and private nonprofit organizations about the FmHA community facilities programs. This fact, plus FmHA's distribution of $50 million to $60 million a year for community facilities, has made the programs very visible here.

City and county officials in North Carolina generally are favorably impressed with FmHA programs and the officials who administer them. For example, one county manager who has worked with FmHA on several water supply and waste disposal projects said, "FmHA officials have been very cooperative. They understand the way local governments operate and the problems that we face." Another local official who developed an FmHA-approved project in a mountain county commented that the FmHA county representative and FmHA officials from Raleigh were "cordial, on the ball, and good to work with." But not all local impressions of FmHA are that favorable. A county official said, "If you have a project that meets FmHA funding priorities, FmHA is easy to work with. On the other hand, if you have a beautiful project but it doesn't rank high in FmHA's funding scheme, there's no use arguing with FmHA about it. They'll just say no."

State officials who work with FmHA on water supply and waste disposal projects say the FmHA does a good job of distributing its money to communities throughout the state. One noted that FmHA funding priorities are occasionally juggled to meet serious needs. He referred to a small, nonprofit water association whose only well was going dry. Although such associations rank low in FmHA's funding priorities, FmHA financed another well for this group. Another state official wondered whether small towns should incur debt for water supply and waste disposal projects that extends for 40 years. He wanted FmHA to provide more grant money to small communities for water supply and waste disposal projects. Another state official disagreed, saying that FmHA should continue to finance these projects primarily with loans. If communities have to pay back the loans, he said, they take better care of the facilities built with them.

A state official who works with FmHA in funding equipment and facilities for rural volunteer fire departments says that FmHA has been a "shot in the arm" for rural fire protection in North Carolina. An official with the State Department of Human Resources said that FmHA took the initiative in financing group homes for the retarded: FmHA's Chief of Community Facilities program in North Carolina approached DHR, and together they worked out a financing program for homes for the retarded in small towns and rural areas.

The North Carolina Local Government Commission, a state agency, approves all borrowing by cities and counties in North Carolina, including FmHA loans to local governments. A Commission staff member noted FmHA's success in getting its loans and grants to small units of government; without those funds, he said, many public facilities built by these governments in the last few years probably would not have been built. He commented on the thoroughness of FmHA's feasibility study of proposed projects, observing that FmHA currently has no delinquencies on water supply and waste disposal loans and only one delinquency on other community facilities loans. It has never had to foreclose on any of its water supply, waste disposal, or community facility loans in North Carolina.

A state official who helps to administer North Carolina's balanced-growth policy pointed out that FmHA officials in Raleigh have done very well in capturing "extra" community facility money for North Carolina from FmHA's national funding pool and from other states' allocations for community facilities. This same official said, however, that not enough FmHA money is allocated to the somewhat larger eligible towns and cities—i.e., those above 5,500 in population. According to this official, many of the larger eligible municipalities will serve as state growth centers and will need expanded public facilities to accommodate their growth. Because FmHA's funding priorities favor towns with 5,500 people or less, North Carolina would have to be exempted from this priority if more of the state's FmHA community facility money were to be channeled to larger eligible municipalities. Otherwise, North Carolina could lose some of its community facility allocation to other states.

Some professional planners have leveled perhaps the strongest criticisms at FmHA's community facility programs.[19] They say that by extending water lines into rural areas, FmHA is encouraging sprawl—and at a time when high energy costs make rural development more expensive and less feasible than before. FmHA makes three responses to these points. First, people in rural areas want the safer and less expensive water that community or public water systems provide. Second, FmHA is financing water projects to serve rural residents only when the projects are technically feasible and have passed federal and state environmental reviews. Third, growth is inevitable for the state's small towns and rural areas, and the county water systems to which FmHA is allocating the largest share of its money represent the most cost-effective method of providing water to accommodate this growth.

Some private investment bankers also have criticized FmHA's com-

19. See, for example, Tom Jacobson, "How Farmers Home Encourages Urban Sprawl," *Planning* 44, no. 9 (October 1978), 21-25.

munity facility programs. They contend that the federal government should not lend money to communities for projects that they cannot afford to finance in the private-sector. The fact that the communities cannot afford private-sector credit indicates that the projects, especially if they are water or sewer projects, are not economically viable and should not be developed. FmHA responds that small towns and rural communities that would be best served by public or community water or waste disposal systems should have them if they can afford FmHA's subsidized loan terms, even if they cannot afford private-sector credit for the systems. This view reflects a congressional value judgment that rural people should have public or community water systems and other community facilities even if they cannot afford to pay private-market costs for them. But it is also an economic decision, based on feasibility studies in the case of projects supported by user charges, to provide subsidized risk capital to get water and waste disposal systems and small communities under way. Once on their feet, these systems and communities will be able to acquire private financing to meet further growth and expansion.

Another point made by an investment banker is that FmHA finances the projects of some governmental units that could obtain credit in the private market. FmHA responds that the projects that FmHA finances for these jurisdictions serve low to moderate income people and must be supported with user charges rather than general tax revenue. FmHA-subsidized financing is needed to make the projects self-supporting and affordable to the users.

Conclusion

What's ahead for FmHA's community facility programs, nationally and in North Carolina? It now appears that national FmHA loan and grant authorizations for community facilities will be considerably lower in the future than in recent years. The Reagan Administration has recommended that the authorizations for water supply and waste disposal loans be cut by more than half to $300 million in 1982 and that authorizations for other community facility loans be reduced from $260 million in 1981 to $130 million in 1982.[20] Although Congress may *not* cut the FmHA's community facility programs as much as the President wants, most observers expect these programs to be reduced considerably from the current funding levels.

Legislation now before Congress also would change the interest rate on FmHA loans for community facilities from a set 5 per cent to a floating rate pegged to the interest rate on municipal bonds; the interest rate on high-grade tax-exempt general obligation bonds as of April 1981 was about 10 per cent. This legislation, introduced but never passed in past sessions of Congress, has a much better chance of passing this time. Even if this proposal should pass, FmHA financing for many water supply and waste disposal projects still will be less expensive than private market financing for such projects. The FmHA loans on these projects will be accompanied by FmHA grants that need not be repaid, thereby lowering financing and debt repayment costs for the projects.

Despite the grants, the cutbacks that are on the horizon for FmHA loan authorizations for community facilities means that less FmHA financing will be available in the future. Along with inflation, this means that the available FmHA loan and grant authorizations will be spread over fewer projects, and the competition among the states for the available FmHA community facility money will be stiffer.

FmHA should consider one change that could stem criticism of its community facility programs from private investment bankers—that is, to finance some major community facilities projects jointly with private investors.[21] FmHA awards loans and grants to projects with the expectation that they will become self-supporting and be able eventually to afford private credit; it also hopes to stimulate other investment opportunities in rural communities. FmHA loans and grants would more directly stimulate private investment if private investors participated in large FmHA-financed projects. Such a move would enlist private capital directly in major rural development projects and give that capital an important stake in the continued development of the towns and rural areas where FmHA money is invested. It also would permit FmHA money to be spread over more projects and demonstrate that FmHA is a partner with the private market in developing North Carolina's small towns and rural areas. ■

20. The data in this paragraph were supplied by the Public Information Office, Farmers Home Administration, Washington, D.C.

21. At this writing, FmHA community officials in Raleigh are pursuing a joint FmHA/private-sector venture for a large project in a small North Carolina town. Still, FmHA regulations do not speak to such joint projects.

Federal Lawsuits: When Must Local Governments Pay Damages?

Michael R. Smith

THE FEDERAL STATUTE 42 U.S.C. § 1983 authorizes a person to sue and recover damages for the violation of a federal constitutional or statutory right caused by official government conduct. In 1961 the United States Supreme Court ruled that a local government was entitled to absolute immunity from liability and could not be sued under Section 1983 for violations of civil rights caused by acts of its public officers and employees.[1] A Section 1983 lawsuit to recover damages therefore could be brought only against the individual government officers or employees responsible for the violation. But, in 1978, the Court lowered the barriers to Section 1983 lawsuits against local governments by deciding in *Monell v. Department of Social Services*[2] that damages may be recovered from the local government's treasury under certain circumstances. In that decision it announced the following standard of liability: a local government will be required to pay damages in a Section 1983 lawsuit if its *official policy* causes a violation of federal rights. For example, a local government will be liable for damages if someone's federal rights are violated in the implementation of an ordinance, regulation, or decision officially adopted by the local governing body. Although the Court's ruling in *Monell* certainly expanded the potential civil liability of cities and counties, it also significantly restricted the liability of local governments by holding that a local unit may not be required to pay damages for the violation of federal rights caused by the independent wrongful acts of its employees.

This article will examine the circumstances under which local governments may be sued under Section 1983 and required to pay damages for the violation of federal rights. The legal principles that govern the liability of local governments in Section 1983 lawsuits are more easily understood when illustrated by several hypothetical examples.

> **Hypothetical Example 1.** Cass County is a (fictitious) community in western North Carolina. The Cass County Board of Commissioners recently adopted a personnel ordinance granting the county manager, Jack Harper, the authority to remove certain county employees. Section 4.1 of the new ordinance requires pregnant county employees to take an unpaid leave of absence at the beginning of their fifth month of pregnancy. Pursuant to this section, Harper informs a pregnant employee in his office, Lucy Denton, that she must begin her unpaid leave of absence immediately. Mrs. Denton becomes very upset because her family needs her paycheck—and her doctor told her three days earlier that she would be physically able to work for at least two more months. After work she calls her brother, an expert civil rights lawyer, and explains her predicament. The next day her brother files a Section 1983 lawsuit in federal district court against Cass County. The lawsuit alleges that the county's pregnancy policy is arbitrary and interferes with her right to personal choice in family matters in violation of Mrs. Denton's constitutional rights. Mrs. Denton's lawsuit requests back pay for her forced absence from work.

In the hypothetical Cass County case, the county will be required to pay damages to Mrs. Denton if she clears two legal hurdles. First, she must satisfy the court that her federal rights have been violated. This should not be difficult, because the United States Supreme Court has declared that arbitrary pregnancy policies, such as a mandatory leave date unrelated to a teacher's fitness, are unconstitutional.[3] Second, Mrs. Denton must prove that the violation of her constitutional rights was caused by an official policy of the county. Again, this should not be difficult, because the constitutional violation—the requirement of a leave of absence at an arbitrary point in no way associated

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1. Monroe v. Pape, 365 U.S. 167 (1961).
2. Monell v. Department of Social Services, 436 U.S. 658 (1978).
3. Cleveland Bd. of Educ. v. LaFleur, 414 U.S. 632 (1979).

with the progress of the pregnancy—was ordered pursuant to Section 4.1 of the county's official personnel ordinance. A formal decision of the local governing body that violates someone's federal rights is clearly the type of official action for which the Supreme Court intended to hold local governments responsible.

Hypothetical Example 2. Sheriff Pool is an elected official and by law (G.S. 162-22) is responsible for operating the Cass County Jail. Security has been a problem in the jail, but the situation has grown worse in recent months. Weapons and drugs have been found in the cells of many prisoners. As a result, Sheriff Pool posts a written policy that requires a thorough body-cavity search of each prisoner admitted to the jail. Early one evening Ms. Gulch, the county librarian, is arrested for reckless driving and taken to the jail. The chief jailer, Bud Long, informs Ms. Gulch that she must submit to a body-cavity search as required by Sheriff Pool's written policy. Of course, Ms. Gulch objects to the search as an unwarranted and illegal invasion of her privacy. Nevertheless, a female jailer is summoned and the body-cavity search is conducted. Later that evening the chief jailer goes into Ms. Gulch's cell and beats her several times with his blackjack. After her release from jail Ms. Gulch hires an attorney and brings a Section 1983 lawsuit against Cass County. The lawsuit alleges that the sheriff's search policy violated her Fourth Amendment right to be free from unreasonable searches and seizures and that the chief jailer's unprovoked assault amounted to unconstitutional punishment.

A local government will be required to pay damages in a Section 1983 lawsuit for the violation of someone's federal rights if the unit's *official policy* caused the violation. The official policy requirement is satisfied easily if the violation can be traced to a formal enactment of the local governing body. But the Supreme Court also ruled that a local government may be held liable in a Section 1983 lawsuit if the violation is caused by a public officer whose acts may be said to represent official policy. The Court's decision is a common-sense recognition that not all government policy is made by members of the local governing body—certain high-ranking public officers also are authorized to make final government policy.

The difficulty with this approach to local government liability is that it is not always clear which other public officers make official city or county policy. Recent lower court decisions have suggested a test for deciding the issue: Has the public officer been delegated the authority to take final action for the local government in a particular area? If the answer is yes and his action or policy violates someone's federal rights, the local government is liable in a Section 1983 lawsuit. The reason: The public officer's action represents the unit's official position or policy in a given matter and therefore the government should answer for the illegal consequences of that policy.

A number of lower federal courts have held that routine body-cavity searches of all incoming jail prisoners without regard to whether there is reason to believe that evidence or a weapon will be found are unconstitutional because they are unnecessary invasions of privacy.[4] Sheriff Pool's search policy therefore violated Ms. Gulch's Fourth Amendment right to be free from unreasonable searches. One issue in Example 2 is whether Cass County should be required to pay damages in a Section 1983 lawsuit for the constitutional violation caused by Sheriff Pool's policy, even though no action was taken by the local governing board. The answer: Cass County will be held liable in a Section 1983 lawsuit for damages caused by the unconstitutional search policy because the sheriff has the final authority to determine county jail policy; in other words, Sheriff Pool's policy regarding searches of jail prisoners *is* Cass County's policy.

The other issue arising out of Example 2 is whether Cass County may be held liable in a Section 1983 lawsuit for the unconstitutional assault against Ms. Gulch by the chief jailer. Again, the decisive question is whether Ms. Gulch's rights were violated because of an official policy of the county. Certainly no official policy of the governing body required or encouraged assaults against jail prisoners. Furthermore, the chief jailer has not been delegated final authority to make policy for Cass County regarding the treatment of jail prisoners. Even if authority had been granted, the delegation would not have been for such a clearly unconstitutional policy. Rather, this is precisely the sort of misconduct that the Supreme Court refused to impute to local governments in *Monell*. The chief jailer's assault was the "independent wrongful act" of a government employee, unrelated to any official policy of Cass County. A local government is not liable in a Section 1983 lawsuit if no identifiable government policy causes the violation of federal rights.

Hypothetical Example 3. Cass County's chief jailer, Bud Long, has a long history of assaulting prisoners. An investigation by Ms. Gulch's at-

4. *See, e.g.*, Tinetti v. Wittke, 479 F. Supp. 486 (E.D. Wis.), *aff'd*, 27 Criminal Law Rptr. 2251 (7th Cir. 1980).

torney reveals an astounding pattern of similar misconduct. At least fifteen prisoners have been beaten in the last six months. Interviews with former prisoners also suggest a lack of concern by Sheriff Pool. Winston Lee, who is now out of jail, told the attorney that Chief Jailer Long beat him up four times during his week in the Cass County jail. Lee claims that he told Sheriff Pool of the unprovoked beating but nothing happened. Fourteen other former prisoners told similar stories. Each one, when released, had told Sheriff Pool about Long's gross misconduct. Ms. Gulch's attorney amends her Section 1983 lawsuit to allege that Cass County's failure to respond to the prisoners' complaints constituted an official policy that encouraged similar future constitutional violations—including the beating of Ms. Gulch.

Some courts have held that inaction by a supervisor (Sheriff Pool) in the face of a pattern of unconstitutional actions by his subordinates (Long) constitutes an official government policy that encourages the continuation of similar unconstitutional conduct.[5] Cass County's liability in a Section 1983 lawsuit under Example 3 therefore depends on whether the unconstitutional assaults are characterized as caused by (1) the independent wrongful acts of the chief jailer, *or* (2) an official government policy of inaction that encouraged the chief jailer's unconstitutional conduct. The courts have been reluctant to infer an official government policy and hold a local government liable in a Section 1983 lawsuit based on alleged supervisory inaction. To discourage frivolous Section 1983 lawsuits against local governments based on supervisors' inaction, most courts have required that the plaintiff (1) allege specific episodes of past misconduct, and (2) identify the supervisors who encouraged future violations. Failure to meet those requirements usually results in dismissal of the lawsuit before trial.

A federal district court considering Ms. Gulch's lawsuit might reasonably find that Sheriff Pool's reckless failure to discipline the chief jailer amounted to an official policy that encouraged future constitutional violations. Ms. Gulch's complaint discusses *specific incidents* of similar past misconduct by the same county officer—the chief jailer. Moreover, the complaint also alleges that a responsible supervisor (Sheriff Pool) was informed of each incident but took no remedial action. The frequency of misconduct within such a short period of time (six months), when coupled with supervisory inaction, favors a finding that the violation was caused by an official policy. The *Monell* requirement of an official government policy therefore is satisfied and Cass County will not be able to avoid paying damages to Ms. Gulch by arguing that the violations were caused simply by the chief jailer's independent wrongful acts.

Hypothetical Example 4. The Cass County commissioners have learned that the county manager, Jack Harper, has been involved in official misconduct—an official investigation revealed that he has taken county property for his personal use. Recently Commissioner Jenkins read a prepared statement at a public board meeting that detailed the investigation findings and accused the county manager of being "a liar and a thief." Then he moved that the board immediately dismiss the manager "for the reasons that I just stated." The board unanimously passed the motion and dismissed Harper. The media covered the board's action prominently and reported Jenkins' allegations that the county manager was "a liar and a thief." After his dismissal, Harper requested an opportunity to respond to the charges and clear his name at a public hearing but was denied. Ten weeks after the dismissal the U.S. Supreme Court announced that a discharged public employee is constitutionally entitled to a name-clearing hearing if his employer makes a public statement that might seriously damage his reputation in the community.[6] Harper has filed a Section 1983 lawsuit against Cass County alleging that his dismissal harmed his reputation and that the board violated his constitutional rights by not granting him a name-clearing hearing. Cass County will be held liable for the reasons outlined below.

This article so far has focused exclusively on local governments' liability in lawsuits brought under Section 1983. Individual public officers also may be sued and held personally liable for damages in a Section 1983 lawsuit if they violate someone's federal rights. But public officers who violate someone's federal rights are entitled to qualified good-faith immunity and will not be required to pay damages if they acted without malice *and* in accord with settled law. The Supreme Court did not decide whether a local government would be entitled to the same qualified good-faith immunity as its public officers when it held in *Monell* that local units could be sued under Section 1983. Two years later, in *Owen v. City of Independence*,[7] the Supreme Court held that local governments sued under Section 1983 are *not* entitled to qualified good-faith immunity from liability for

5. *See, e.g.*, Ellis v. City of Chicago, 478 F. Supp. 333 (N.D. Dec. 1979).

6. Board of Regents v. Roth, 408 U.S. 564 (1972).

7. Owen v. City of Independence, 48 U.S.L.W. 4389, 63 L.Ed.2d 673 (1980).

damages for violations of federal rights caused by official governmental policy. A basic reason for the Supreme Court's decision was the need to give individuals whose federal rights are violated by official government policy a meaningful remedy under Section 1983. The Supreme Court reasoned that if local governments were entitled to the same qualified good-faith immunity afforded their public officers, a person whose federal rights were violated often would not be able to recover any damages and would be forced to absorb his own losses. Such a result would contradict the basic legal principle that the person responsible for an injury should pay for the harm.

The Supreme Court's decision in *Owen* is sure to increase significantly the number of marginal lawsuits filed under Section 1983. The decision means that local governments will be held strictly liable in Section 1983 lawsuits for violation of federal rights caused by its employees or officers in executing official government policy. The fact that a local government's employees acted in good faith and could not have predicted that their actions would be held to violate someone's rights does not protect the unit against liability for damages under Section 1983. Recovery is automatic when it is proved that an official government policy caused the violation of federal rights.

Implicit in the Supreme Court's decision is a clear message to local governments that one prudent means of protecting the local treasury from potentially crippling judgments in Section 1983 lawsuits is to purchase liability insurance. Each local government should examine its liability insurance policy, if there is one, to determine whether it sufficiently protects the unit against the expanded potential for liability for damages under Section 1983. Clearly, the recent Supreme Court decisions place a premium on having local officials consult with the government attorney before taking action that is not clearly constitutional—a matter that governing board members and department heads cannot always predict.

Cass County would not be held liable in the hypothetical case outlined in Example 4 unless the violation of the county manager's constitutional rights was caused by official government policy. The dismissal of Harper in violation of his constitutional rights, the harm to his reputation, and the denial of a name-clearing hearing were caused by the Cass County Board of Commissioners. No government policy is more official than one made at a formal meeting of the governing body. But not until ten weeks after the county manager's dismissal did the Supreme Court declare it a violation of a dismissed public employee's constitutional rights to refuse him a name-clearing hearing if his reputation has been harmed by his employer's public statements. Cass County might argue that it should not be held liable because its county commissioners could not have known when they acted that their actions would violate the manager's constitutional rights. In fact, the commissioners individually would be entitled to qualified good-faith immunity from liability for damages in a Section 1983 lawsuit because they acted in accord with settled law at the time of the dismissal. But after *Owen* Cass County is not entitled to qualified good-faith immunity and would be strictly liable in damages for the violation of constitutional rights.

Hypothetical Example 5. Fourteen-year-old Wilson Nash is an epileptic student at Cass County High School. Wilson experiences occasional mild seizures, but he has nevertheless remained in a regular classroom. One day during class he suffered a severe seizure that alarmed his teacher, and he was sent home. That same evening the Cass County Board of Education removed Wilson from a regular classroom and permanently placed him in the Homebound Program. The Education for All Handicapped Children Act of 1975 (P.L. 94-142) is a federal law that prohibits any change in the educational placement of a handicapped student without a prior hearing. Wilson's mother has filed a Section 1983 lawsuit against the school board alleging that its official policy—placement in the Homebound Program without a hearing—violated Wilson's rights under the federal statute. The Cass County School Board will be held liable for violating Wilson's federal rights through its official policy.

Section 1983 creates the right to bring a lawsuit under carefully defined circumstances. Most courts had assumed that the language of Section 1983 authorized lawsuits only to recover damages for the violation of a federal *constitutional* right. In *Maine v. Thiboutot*,[8] however, the United States Supreme Court held that Section 1983 also authorizes a person whose rights under a federal *statute* have been violated to sue for and recover damages. The effect of *Thiboutot* is to permit Section 1983 lawsuits for alleged violations of the multitude of federal statutes that provide rights and protections for private citizens. A local government's improper administration of a federal grant program—such as the Food Stamp Act 1964 or the Comprehensive Employment and Training Act of 1978 (CETA), for example—also could result in a recovery against the local treasury

8. Maine v. Thiboutot, 48 U.S.L.W. 4859, 65 L.Ed.2d 555 (1980).

under Section 1983. The *Thiboutot* decision represents the third major Supreme Court decision to expand local government liability under Section 1983 and no doubt will add to the number of lawsuits filed against local units.

Example 5 illustrates the liability of a local administrative unit—the Cass County school board—for the violation of someone's federal statutory rights. Of course, the plaintiff must satisfy the requirement under Section 1983 that official government policy caused the federal rights violation. The school board is authorized to make final educational policy for the Cass County school district. Therefore its decision to change Wilson Nash's educational placement without a prior hearing constituted the official policy of the administrative unit. That official policy deprived the boy of rights guaranteed him under federal statute P.L. 94-142. As a result of the Supreme Court's decision in *Thiboutot*, the Cass County school district will be required to compensate him for any damages caused by its official policy, which violated his federal statutory rights.

While the three landmark Supreme Court cases discussed in this article are a clear signal to local governments that they will be held strictly accountable for official violations of federal rights, there is some danger of overreaction. Local officials may be tempted to refrain from official actions and decisions, and perhaps neglect important government responsibilities, just to reduce the risk of civil liability—an unwise attitude. Winning a Section 1983 lawsuit against a local government is still difficult. As we saw earlier, the plaintiff must clear some difficult hurdles, such as establishing that the violation results from an official government policy. The response of local governing boards and high-level administrators to the Supreme Court decisions should be to be more cautious before taking action that might infringe federal constitutional or statutory rights, and to consider how to protect the public treasury from the increased risk of liability. If these precautions are taken, local governments can continue to make the reasoned decisions necessary to function efficiently without being intimidated by the possibility that they will be held liable for violations of federal constitutional or statutory rights. ■

Seriously Troubled Youth: North Carolina Confronts the Problems

Robert L. Wilson

THIS ARTICLE is about a disturbing and heartbreaking problem—children and adolescents who are potentially dangerous either to themselves or others. Their violence or aggressiveness often appears in completely uncontrolled temper tantrums or outbursts, as when a youth completely destroyed a hospital room. Other youths have set fires, mutilated themselves, attacked another person, or tortured animals or smaller children. The cost of these children is staggering—in human terms, in agony to themselves, to their families, to society; and in monetary terms, in the expense—of trying to deal with and treat them in various types of facilities for juveniles, and later in facilities for adults.

These youngsters may be dangerous for various reasons. Some may be dangerous to themselves or others because they have an inherent mental disorder. Others may be dangerous because the environment in which they have grown has taught them violence. Surrounded by antisocial behavior, it is all they know. And others may be violent for reasons not understood.

Whatever the reason for their behavior, the fact is that society is faced with the need to deal with children who pose a very real threat—to themselves and/or to others. What do we do with them? Traditionally their home community has paid very little attention to these aberrant children until they do something drastic enough to justify locking them up in an institution—a training school, a mental hospital, or a prison unit for youthful offenders. The reason that they receive little treatment in their home communities is that most treatment for emotional disturbances and antisocial behavior requires cooperation from the patient—and these youngsters are least of all cooperative.

Children may come before juvenile authorities under a variety of circumstances. A child may, for example, be abused or abandoned, or undisciplined, or involved in criminal activity, or emotionally or mentally disturbed. Whether the child is in trouble with the law or has other types of problems, the courts and social and mental health agencies have, in recent years, taken new approaches to dealing with him. For example, the courts used to deal with children in a parental, informal manner. As a result of court cases and studies of juvenile delinquency over the past fifteen years,[1] reformers' approach to serious criminal misbehavior by juveniles has emphasized formal adjudication, with stricter procedural safeguards that were formerly extended only to adults. As a result children accused of serious misconduct are treated more like adult criminal suspects than they formerly were.

Changes also have occurred in how troubled adolescents are treated and placed by social and mental health agencies. Current trends in juvenile justice and in mental health now favor doing more than shutting these youths away in an institution. There is a growing effort to keep all exceptional children (and adults) out of institutions (a concept called "deinstitutionalization") and to keep them as close to their home environment or home community as possible ("normalization"). Finally, the belief is growing that disturbed children have a right to treatment, as recent studies on juvenile behavior, federal legislation, and court cases all show.[2]

In many respects North Carolina has mirrored the national efforts to keep troubled kids close to home and out of

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1. *In re* Gault, 387 U.S. 1 (1967); *see also* Report of the Juvenile Delinquency Task Force of the President's Crime Commission (1968).

2. See, for example, Goffman, *Asylums* (1961), and Wolfenberger, *The Principles of Normalization in Human Services* (1972). See also the Community Mental and Retardation Centers Act (1974), the Education for All Handicapped Children Act (1975), and the Mental Health Systems Act (1980). See also Rouse v. Cameron, 373 F.2d 451 (D.C. Cir. 1966), Creek v. Stone, 379 F.2d 106 (D.C. Cir. 1967); Wyatt v. Stickney, 325 F.S. 781, 334 F.S. 1341, 344 F.S. 373, 344 F.S. 387 (M.D. Ala. 1972), *aff'd and modified sub nom*, Wyatt v. Aderholt, 503 F.2d 1305 (5th Cir. 1974).

institutions and to give them the treatment they need. Many organizations both public and private have done studies that confirm the need to treat these children in their home communities,[3] and state policymakers have agreed.[4] Recent lawsuits have advocated policies that would afford humane and effective treatment of children with behavioral problems, especially those who are violent or aggressive.[5]

In 1980, the Juvenile Justice Planning Committee of the Governor's Crime Commission and the National Council on Crime and Delinquency (NCCD) sponsored a study by the Center for Urban Affairs and Community Services at North Carolina State University. That study, which investigated the characteristics of adolescents who are in trouble with law or society, is the focus of this article.

THE FACT IS THAT there are not many places to put juveniles with behavioral problems. The most restrictive setting to which a delinquent youth may be assigned is either a youthful offender unit operated by the Department of Correction (DOC) or a training school, operated by the Department of Human Resources (DHR). Neither type of facility offers many services for youths, and neither receives the level of funding required for adequate services, though training schools have a slight edge on both services and funding per capita. In the summer of 1980, approximately 550 youths (ages 14 through 17) were housed in DOC facilities, and 611 (ages 10 through 17) were in training schools. The average cost per youth per year is $9,000 for DOC facilities and $22,000 for all training schools except the most restrictive, where the cost is $31,000 (Dillon School at Butner).

Or such a child may be placed in a group home, where the cost per child ranges between $12,000 and $18,000 per year. This figure is not nearly high enough to cover the staff and service costs associated with an aggressive, hostile youth (e.g., constant supervision). Since the amount that group homes receive is constant for each child, these homes tend not to accept violent or aggressive children. Specialized foster care homes are another option for providing services to adolescents with serious behavioral problems, but they are few in number. These children sometimes wind up in jail or a detention home, for want of a better place to put them for brief periods.

Seriously misbehaving youths usually cannot live at home while they receive services because most local communities' support services are too fragmented to offer either the profound help or the supervision that these children need. Providing such services in the community would be at least as expensive as providing them in the least expensive residential institutions (e.g., a DOC facility) and is simply not possible at current funding levels for such nonresidential service providers as mental health centers and similar facilities.

Some children with behavioral problems that arise from emotional disturbance or mental disability are better placed in a state mental hospital—at a cost per child of between $44,000 and $64,000 per year. Such a facility offers a wide range of services, but it is also highly restrictive. Furthermore, children who are sometimes violent and aggressive do not respond well to the traditional treatment offered in the mental hospitals, and the courts have held that these children who have not committed a criminal offense may be kept in a locked institution against their will only if reasonable therapeutic progress can be shown. For hostile, uncooperative adolescents, this demonstration is difficult. Consequently hospitals often reject kids with behavioral problems in favor of children with other types of mental problems with whom they can be more successful.

Mental hospitals *can* provide more effective treatment and supervision for children with serious behavioral problems—but only with increased staff and cost. In fact, such a program at a state mental hospital successfully treated two boys who were named in the *Willie M.* suit.[6] That is, it succeeded in that it alleviated the need for a very intense treatment and supervision program, but the boys could not be discharged from the mental hospital because they still needed services beyond what other placements (e.g., a group home in the community) could offer under the existing funding and service-support systems. In other words, there was no place for the boys to go.

A new Adolescent Re-education Program at Butner aimed at treating youths with serious behavioral problems began in 1980. This program tries to make the participants' lives with the facility more normal. For example, they have community "vacations" on weekends. In addition, the program's treatment philosophy has been directed toward children with serious behavioral problems, and the treatments are specifically designed for their needs. It is too soon to tell whether this program will succeed and what its cost will be.

What frequently happens to youths with behavioral problems is that they are identified by the human services

3. See the North Carolina Bar Association's Penal System Study Committee report called *As the Twig Is Bent* (1972), which concluded that training schools were outmoded and did not offer the treatment and services that these young people needed. In 1973, a series of workshops throughout the state, funded by the National Endowment for the Humanities through the Institute of Government at the University of North Carolina at Chapel Hill, supported the idea that children should receive services as close to their home as possible—that is, community-based services. Groups like the League of Women Voters, the National Council of Jewish Women, and the Junior Leagues supported the concept.

4. In 1975, the North Carolina General Assembly provided that status offenders would no longer be placed in training schools (formerly status offenders who were placed on juvenile probation). Local communities were made responsible for providing alternative programs to these children, with technical assistance from the Department of Human Resources and partly funded from the money freed when two of the state's training schools were closed.

5. Willie M. v. the State of North Carolina, Dist. Ct. Charlotte, N.C. 1979.

6. *Id.*

system before they become dangerous but are not given preventive help in their home community. Local human services systems have not been arranged to provide proper treatment for this type of child. Rather, the services are fragmented and uncoordinated so that the child does not receive the full range of treatments and services that he needs. Without preventive help he may eventually get into such difficulty that he is locked up in an institution, usually away from his home community. After serving his time (in one way or another), he comes back to the same ineffective local system, and the cycle begins again. All too often a child gets out of this cycle only by becoming an adult and moving into services and cycles for adults.

Method of study

The study for the Juvenile Justice Planning Committee of the Governor's Crime Commission (the National Council on Crime and Delinquency provided the funds) was conducted by the Center for Urban Affairs and Community Services of North Carolina State University with supervision from an Oversight Committee appointed by the Juvenile Justice Planning Committee. (An official report on this study will be available from the Governor's Crime Commission by the time this article appears.)

The study undertook to estimate the number of North Carolina youths who have serious behavioral problems, to determine their characteristics, and to chart their movement through the existing service system. One primary problem in this research was how to define the youths to be included. The age group chosen was 10 through 17 years of age, but the term "youths with serious behavioral problems" was hard to pin down. The researchers did not want to limit the study to violent and/or aggressive youths—they were also interested in other types of behavioral problems, such as running away, attempting suicide, or stealing. In other words, children can show that they are seriously troubled in a variety of ways, of which being aggressive or violent is only one. To study only violent and aggressive youngsters would exclude many seriously troubled youth in the state who surely need help.

Rather than try to define "serious behavior problems," the researchers decided simply to study youths who were in the care of certain institutions and agencies: the youthful offender units (DOC), training schools (DHR), state mental hospitals, wilderness camps, group homes, and foster care homes. The data from the Department of Correction and the foster care homes were not usable for a variety of reasons and were not included in the final analysis. In addition, the researchers realized that some youths who needed help would not be found in these agencies because they could not be appropriately served there. Therefore, certain county agencies (mental health centers, departments of social services, and juvenile court counselors) were asked the following question: "Who are the youths, aged 10 through 17, for whom you cannot find appropriate treatment or placement because of their behavior or emotional disturbance?" The feeling was that North Carolina youth with serious behavorial problems would ultimately come into contact with either one of the residential agencies or one of the county agencies.

A random sample was taken of all youthful residents of state mental hospitals and training schools. Data for youths at wilderness camps were provided by the Youth Services Division of DHR. The children from group homes and the local agencies were sampled by taking a random sample of 20 counties in North Carolina stratified by population size—Brunswick, Camden, Carteret, Cleveland, Dare, Duplin, Durham, Greene, Harnett, Henderson, Mecklenburg, Montgomery, New Hanover, Orange, Pasquotank, Polk, Transylvania, Vance, Warren, and Yadkin.

The study staff went through each child's records and collected data on his age, sex, and similar factors; types of behavior that he exhibited; family background; characteristics of his home community; school behavior; specific test results (for example, IQ tests); the child's offense records, medical history, and mental health diagnoses; and a detailed account of his service history.

After information had been collected at the residential agencies and the local county agencies, a mechanism for differentiating among juveniles on the basis of their behavior was constructed. The children included in the present study were divided into three categories of behavioral severity as perceived by institutional and agency staffs: low, medium, and high. The kinds of behaviors chosen for classification according to severity were selected because they were the types that human service providers perceived as making treatment difficult—temper tantrums, attacks with or without a weapon, homicide, public sexual activity, rape, prostitution or promiscuity, arson, cruelty to animals, running away, attempted suicide, self-injurious behavior, vandalism, verbal aggression, stealing, and alcohol or drug abuse. The staff went through each youth's records and recorded the number of times that each behavior was indicated. On the basis of how often each child engaged in one of these acts, an index was devised.

The behavioral index score indicates a range in the severity of youths' behavioral problems. At one end would fall most children, who have few difficulties, while at the other end come the ones who are burdened with behavioral problems. Any division of this continuum into categories is arbitrary to some extent, but such divisions are useful and necessary for discussion. The researchers used objective criteria to divide the population of the present study into three categories that are labeled "low," "medium," and "high." But other objective criteria could also have been used. The standards that were used were chosen because they would result in a minimal estimate of the number of children with severe behavioral problems.[7]

A juvenile must misbehave very seriously to be classified by the study

7. It was important that the behavioral index score, and consequently the classification into one of the three categories of behavioral severity, not be related to the age of the youth or how long he had been in the human services system. The behavioral

as having a high level of behavior problems. For example, if a boy had committed six temper tantrums, two attacks with a weapon, four attacks without a weapon, 12 instances of running away, three instances of self-injurious behavior, 10 instances of vandalism, 14 instances of verbal aggression, and seven instances of stealing, his behavior would only barely have reached the threshold for classification in the "high" category.

Results

Twenty-seven per cent of the 684 adolescents included in the present study were classified as having a low level of behavioral problems, 48 per cent were classified in the medium level, and 26 per cent were in the high category. From the sample completed for this study, the researchers estimated that at least 577 North Carolina juveniles would be considered to have a high level of behavioral problems. The researchers believe that this is a conservative estimate. Another 1,059 youths were estimated to have behavioral problems of "medium" severity.

Over half of the children in the "high" classification had been identified by the staff of local agencies (mental health centers, social services departments, and juvenile courts) as youths for whom appropriate treatment or service could not be found. These children will be called "not appropriately served." Of the 380 youths in the "high" category who were not appropriately served, 28 per cent were currently residing in DOC facilities for youths, training schools, mental hospitals, or wilderness camps. Another 14 per cent were residing in either a group home or a foster home. More important, 41 per cent of these children were not in any kind of special facility. In other words, almost half of the "high severity" youths who were identified as being not appropriately served were living at home—with their parents, relatives, or others. Most of these youngsters were receiving services from a local service provider (the juvenile court counselor, mental health center, or social services department), but the service was in various ways inadequate. Researchers also found that these adolescents had lived in an average of three different residential institutions or programs, not counting their own homes. Also, they had been served by an average of almost five service providers. Obviously, these children had moved extensively through the human services network.

What are the characteristics of the juveniles in this top classification? Approximately two-thirds of them were male and two-thirds were white. They were, on the average, almost 15 years old. A little over half of them did poorly in school, and three-quarters of them had records of overaggressiveness in school. Half of these children lived with both an adult male and an adult female, and a third with only a female. Almost two-thirds of them had lived with their natural parent(s) for most of their childhood. But for over half, the family arrangement had changed more than once.

Their family background was perhaps the most interesting finding of the present study. For almost half of these children, the family's primary wage earner had not finished high school. Over half of the families had been on some form of public assistance, and the children had, on the average, three siblings. Over half of these youths had been abused or neglected; over a third came from families that had a record of family violence, and a quarter came from a home that had completely disintegrated.

While they were in the human services system, these children had histories that contained an average of 14 uncontrollable temper tantrums, 17 attacks without a weapon, two attacks with a weapon, six instances of prostitution or promiscuity, eight episodes of running away, three instances of self-injurious behavior, seven instances of vandalism, seven instances of stealing, 30 instances of alcohol or drug abuse, and 44 instances of verbal aggression. The average occurrences for other behaviors was much smaller—.10 instances for homicide, just over one instance of public sexual activity, less than .05 for cruelty to animals, and .025 for attempted suicide.

For all of the children in the study, consistent systematic differences appeared between the categories. For most of the information presented above, those labeled as "medium" behavior problems committed the misbehaviors more often and earlier, had more problems in school, and had more detrimental family backgrounds than children in the "low" category but less than those in the "high" category. For example, 55 per cent of the youths in the top category did unsatisfactory work in school, while 44 per cent of the kids in the medium category did so, and only 39 per cent of the kids in the low category. Similar patterns were found with regard to where the children had lived and/or received services. "High-severity" children tended to have been placed in the more restrictive settings (mental hospitals and training schools), had lived at more places, and had been treated by more service providers than kids in either the "medium" or "low" groups.

Tracing the youths' movements through the existing service system shows that many of them in a residential location had lived in that type of facility before. For example, many who were found in a training school had been in a training school before. Furthermore, many of those who had lived at a location more than once were at home between placements, indicating that many children were "bouncing around" within the service system. Finally, many children in either a training school (45%) or mental hospital (21%)—the most restrictive settings—were sent there as their first non-home placement. These facts indicate that there is no rational, coordinated approach to the care and placement of youngsters who present special problems of violence and aggression—no means by which these children can be moved from the least restrictive to the most restrictive setting, and vice versa, as their needs require. One kind of option that those who work with these children badly

index score and time in the service system and age were correlated sufficiently low for the present research (r = .01 and .13, respectively).

need but do not have is a restrictive residential facility located in the child's home community.

Along with this lack of coordination in services is the lack of interaction between the training schools and mental hospitals. In the top category, only 7 per cent of the juveniles then in training schools had ever been in a mental hospital, and only 7 per cent then in a mental hospital had ever been in a training school. This could result from a tendency to label seriously misbehaving children early but indelibly as either a "criminal justice youth" or a "mentally ill youth." In any event, this finding indicates the need to coordinate the services to ensure that children receive the services they need rather than the ones offered by the agency with which they happen to come into first contact.

Community-based group homes in Western North Carolina.

Recommendations

On the basis of the study, the Oversight Committee made several recommendations with regard to the treatment of seriously misbehaving juveniles. Specifically, it recommended that (1) each such child be offered services that are good-faith efforts to allow him to reach his or her own potential; (2) each child should be served in the least restrictive, most normal setting possible consistent with the need to keep him from harming himself or others; (3) unavailable needed services should be developed within a reasonable period of time; and (4) it should be possible for treatment to continue beyond a youth's eighteenth birthday if he needs it and agrees to it.

The research for this study indicated that adolescents who were classified as having a high level of behavioral problems had received services from local service providers at a younger age, usually before their behavior had become extreme, than other misbehaving juveniles. But the services were not effective in preventing them from presenting serious behavioral problems as they got older. Usually the severity of their behavioral problems increased to the point that they could be justifiably and legally sent to a state institution. This conclusion is based on the fact that a high percentage of "high severity" youth went directly from home to a highly restrictive institution away from their home community—partly because community-based residential and nonresidential treatment programs with some degree of restrictiveness were not (and still are not) available. There is no continuum of care for youths with serious behavioral problems—a large hole exists in the spectrum of options for dealing with these children. The Oversight Committee recommended that a full range of care be developed within a community that would allow kids to move from more intensive to less intensive services as they make therapeutic progress. Furthermore, it recommended that each local mental health authority make an inventory of the services available in the community and develop a plan to offer the services needed to provide a broad array of services for children with behavioral problems.

A continuum of services at the local level would have the following benefits. First, it would allow more intensive services to be offered to a child at an earlier age, before his problem has reached a serious level. Second, it would allow earlier intervention with high-risk youth before their behavior becomes so disruptive that they must be sent to a state institution. Third, it would leave the responsibility for these youths with the local communities, which could no longer solve their problems by shifting responsibility for these children to the state. This approach may be a better strategy than sending them away, since the youths usually return to their home community after being in a state institution, where the treatment they received may have been ineffective. Fourth, a continuum of local care could provide intensive services to institutionalized juveniles when they return to their home community—a fact that would decrease the possibility that a child would be held at a state institution longer than necessary because no local "half-way" treatment was available. A half-way facility would also help assure a successful transition from treatment at an institution to the youth's home community.

As we have seen, disruptive or violent children are often "bounced around" from one agency to another, and where a child goes and how he is treated are often determined by which agency he encounters first. A system is needed that will follow the child and provide coordinated care rationally related to his current requirement. The Oversight Committee recommended that the local mental health authority of the child's home community be made responsible for providing this oversight, assisted by DHR.

The study indicated certain factors that might be used to identify children likely to become adolescents with behavioral problems. For example, of the youths classified as having a high level of behavioral problems, 46 per cent had been abused or neglected as children, and 58 per cent came from families that also had some form of alcohol-related problem. More research will be needed to determine how well these variables predict which youths will manifest behavioral problems. The Oversight Committee recommended that community health agencies be responsible for coordinating the early detection and intervention programs for high-risk youth.

Implications

The themes of deinstitutionalization, normalization, and right to treatment underlie many of the Oversight Committee's recommendations. They support the view that children should not be "put away" in institutions but should receive services in as normal an environment as possible and that these children have a right to treatment even if the needed services are not currently available.

The Committee recognized that a program that would achieve these goals would mean that very few children would be placed in state residential institutions (e.g., DOC facilities for youthful offenders, training schools, and state mental hospitals). This fact would inevitably mean that these institutions' roles would change, and in some cases the alteration would be significant. Furthermore, with this reduction in these facilities' populations, their budgets could be cut and the funds that are freed could be directed toward community-based services for youths with behavioral problems. This reallocation of resources would obviously require much work and cooperation between the existing human services organizations.

To accomplish normalization, the Oversight Committee stressed treatment programs that could offer services to adolescents as close to their home community as possible (i.e., community-based services). Ideally, a child could receive treatment while he lived at home. If he had no family, or if the family environment was detrimental, he could be placed with a substitute family or family setting—specialized foster care or a group home. Given the child's behavioral problems and the fact that the treatment plan will be applied in the context of his family, treatment should be directed at the child's total environment, including his family setting. The services could range from counseling, to budget assistance, to respite care for the parents.

One major criticism of treating children within their family context is that some youths are extremely violent and aggressive and need to be "locked up." But the need is not per se to put these destructively hostile children in a locked facility; rather, the need is to prevent them from harming themselves or others. There are ways other than locking them up to achieve this end. Many programs have successfully used an alternative that is more consistent with the principles of normalization and deinstitutionalization; that is, an adult is assigned to accompany a potentially aggressive or violent child everywhere he goes—to school, to play, etc.—until the child learns self-control. The adult has been trained in "therapeutic holds" that would prevent the youth from harming anyone. Such programs are obviously expensive but not necessarily more expensive than residence in a training school or state mental hospital and are usually required for less time than the average stay in a residential facility.

While some type of physically restrictive setting might be required for violent or aggressive youths, these lock-up facilities may be most effectively used for short periods of days or perhaps months rather than the months or years for which some of these children are now committed. Furthermore, rather than large state facilities, many small community-based facilities should be established. Obviously, holding a child in smaller facilities in home communities is closer to the principle of normalization than placing him in a large centralized institution.

The Oversight Committee recommends that the program to provide coordinated case management and a continuum of care be set up in two phases—first in a cross-section of selected areas during fiscal year 1981-82, and then all across the state.

The Committee has also recommended that all four regional area mental health programs examine their present treatment resources to determine what new services would be required to have a complete continuum of care and to develop a case-management program, even if the plan cannot immediately be set in operation.

Of course, the major obstacle to these recommendations is financial. Establishing and maintaining the Committee's recommended programs will be expensive. Moreover, the recommendations are being put forward in a time of federal and state budget-cutting. Some of the recommended programs could be financed from funds saved by decreasing the number of youths who would be committed to statewide residential institutions. But that is a long-range possibility, and other more immediate funding sources will be needed for these programs. We need to recognize that declining to allocate funds for the recommended programs will not reduce the amount of money that is *spent* on the state's youths with behavioral problems—these funds (and probably more) will simply be spent on dealing with these children in other, less effective ways. For example, keeping a child in the state's most restrictive training school will cost approximately $31,000 a year—and he may be there for perhaps three years. Maintaining a child in an intensive community-based program may cost more than that during the first year, but the cost will decrease each year, will be needed for fewer years, will be of more benefit to the child, and will prevent him from receiving the "criminal training" that frequently goes on at penal institutions.

We have seen that at least 577 North Carolina children are estimated to have a high level of behavioral problems. If $20,000 per child were spent to treat these children in community-based facilities, the total cost for the first year would be over $11 million dollars. But this would not be a recurring yearly expense. One reason for the large number of children with serious behavioral problems is the backlog of children who have not been receiving services. The number of children with serious behavioral problems is greater now than it will ever again be after an effective treatment system for these children has been established.

But over and above the potential savings in money and trauma to the state and its communities that a system of locally based treatment facilities for aggressive children would bring is the fact that such a system would be more humane to the children and better able to help them become contributing members of society.■

Is Regionalism Working in North Carolina?

Robert C. Hinshaw

THE CONCEPT OF REGIONALISM has been around for a while in North Carolina—for more than ten years in formal, statewide arrangements and even longer in less formal localized structures. It came about as an effort to find new solutions to old problems—and, increasingly, to brand-new problems. Perhaps it is time to take a look at regionalism. What is it? What has it accomplished? Are North Carolinians better served as a result of it, or is it merely "another layer of government?"

For purposes of this article, regionalism refers to the official grouping of counties in the state, along with an officially designated agency representing the local governments (or most of them) within each multi-county group, for purposes of cooperation on matters of mutual interest. In North Carolina the term covers several kinds of entities—frequently designated as lead regional organizations (LROs) but more often as councils of governments (COGs), and regional planning and economic development commissions. Some federal programs and other states use such terms as areawide planning organizations, local development districts, and substate districts for their regional organizations.[1]

Multi-county organizations have existed in North Carolina (in the western and eastern ends of the state) since the 1960s, largely in response to the requirements of the federal Appalachian Regional Commission and Economic Development Administration programs. Other parts of the state developed such bodies in the late sixties and early seventies—again primarily because of various federal programs. One writer pointed out that they were primarily regional *planning* agencies, but even in planning they had little effect on the local governments or daily life in North Carolina—probably because they had no authority to implement their plans, and the local governments, which *could* carry out the plans, had no strong commitment to their region.[2]

The early seventies were a period of "New Federalism,"[3] in which responsibility for many activities was returned to the states and the local governments with considerable funding from the federal government. To help North Carolina make the most of the opportunities presented, in 1970 Governor Robert Scott designated 17 regions (in 1979 one region was split, so that there are now 18; see Fig. 1) that covered the entire state explicitly for "the effective implementation of local, state and federal planning and development . . . [and to] facilitate delivery of better services to our people."[4] The State Planning Officer noted that the regional designation sought "multi-county cooperation aimed at facilitating program administration and planning and development activities to a level otherwise unattainable by individual cities or counties."[5]

In 1971 the State Department of Administration indicated that it would recognize a single lead regional organization (LRO) in each multi-county region; an LRO would have certain basic planning responsibilities and the staff and capability necessary to serve as a regional clearinghouse in the statewide "A-95 Review" system that had been established in response

The author is Coordinator of Regional Planning in the Division of Community Assistance within the North Carolina Department of Natural Resources and Community Development. He wishes to thank the following officials, on whose experience and opinions this article is partly based. Mayor Charles H. Campbell of Brevard, present chairman of the Land-of-Sky Regional Council and member of an advisory council to the National Association of Regional Councils, Richard A. Fender, executive director of the Region D Council of Governments, Betty Ann Knudsen, a member of the Wake County Board of County Commissioners and an active participant with the Triangle J Council of Governments, and J. Roy Fogle, executive director of the Neuse River Council of Governments and a past president of the National Association of Development Organizations.

1. Bruce D. McDowell, "Substate Regionalism Matures Gradually," *Intergovernmental Perspective* (Fall 1980), 20.

2. David M. Lawrence, "Aspects of Regionalism in North Carolina," *Popular Government* 40 (Summer 1974), 20-24.

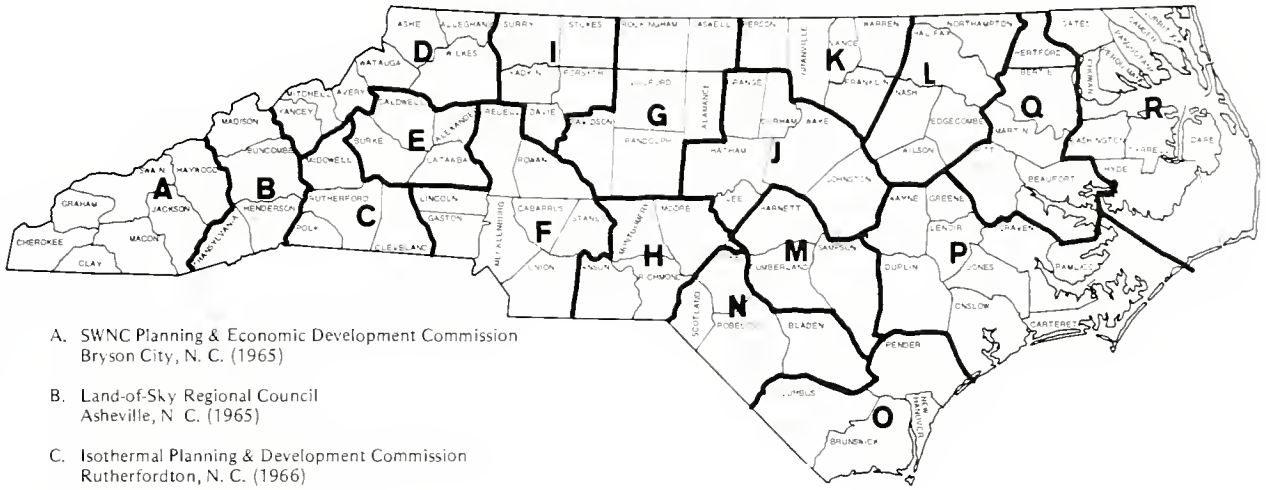
3. The "New Federalism" referred to concepts and some legislation promoted by the federal administration during the early seventies. Basically indicating the decentralization of federal power to state and local levels, the concept led to the State and Local Financial Assistance Act of 1972 (which provided general revenue-sharing), the Housing and Community Development Act of 1974, and other legislation that was aimed at "simplifying" previous categorical (more rigid) grant programs.

4. Robert W. Scott, Executive Order 3, May 17, 1970, Governor's Office, Raleigh, N.C.

5. Ronald F. Scott, North Carolina Multi-County Planning Regions, N.C. Department of Administration, July 1970, p. 4.

Figure 1

NORTH CAROLINA MULTI-COUNTY PLANNING REGIONS, OFFICE LOCATIONS AND ESTABLISHMENT YEAR*



A. SWNC Planning & Economic Development Commission
Bryson City, N. C. (1965)

B. Land-of-Sky Regional Council
Asheville, N. C. (1965)

C. Isothermal Planning & Development Commission
Rutherfordton, N. C. (1966)

D. Region D Council of Governments
Boone, N. C. (1974)

E. Western Piedmont Council of Governments
Hickory, N. C. (1968)

F. Centralina Council of Governments
Charlotte, N. C. (1968)

G. Piedmont Triad Council of Governments
Greensboro, N. C. (1968)

H. Pee Dee Council of Governments
Troy, N. C. (1971)

I. Northwest Piedmont Council of Governments
Winston-Salem, N. C. (1979)

J. Triangle J Council of Governments
Research Triangle Park, N. C. (1973)

K. Kerr-Tar Regional Council of Governments
Henderson, N. C. (1971)

L. Region L Council of Governments
Rocky Mount, N. C. (1971)

M. Region M Council of Governments
Fayetteville, N. C. (1971)

N. Lumber River Council of Governments
Lumberton, N. C. (1971)

O. Cape Fear Council of Governments
Wilmington, N. C. (1967)

P. Neuse River Council of Governments
New Bern, N. C. (1967)

Q. Mid-East Commission
Washington, N. C. (1968)

R. Albemarle Regional Planning & Development Commission
Hertford, N. C. (1971)

*Legal establishment year of present organization — does not include date of any predecessor agency.
Source. N. C. Department of Natural Resources and Community Development.

to the federal Intergovernmental Cooperation Act of 1968.[6] By the end of 1972 the state had designated each of the 17 regions as the LRO for the area within its perimeters.[7] Getting the LRO system off the ground was no a certain amount of conflict inevitable. Furthermore, officials had very little small feat, since organizations and boundaries that already existed made confidence in the new organization and a very large resistance to change.

Regional planning for human services. A major functional change in the regional organizational role came about in 1974 as the state-level counterpart of the New Federalism. In May of that year Governor James E. Holshouser, Jr., offered local elected

6. This act is a national policy statement that addresses the cooperative and intergovernmental nature of federal and federally assisted programs. It directed the President to establish rules and regulations dealing with the coordination, review, and evaluation of these plans and programs. The federal government's Circular No. A-95, first issued in 1969, was based on Title IV of the 1968 act—hence the name "A-95" for the coordination process in regard to federally sponsored programs. These federal regulations required that each state establish a state and "areawide" or substate regional system to give each locality a chance to contribute to or to comment on proposed plans and programs that involve federal moneys and/or assistance.

7. Of the 17 organizations that existed in 1972, 12 were established as councils of governments (COG) and five were regional planning and development commissions (RPDC). No basic changes in designation were made until the eighteenth LRO (a COG in a new Region I) was fomally recognized in July 1979.

officials, through their respective LROs, the option of assuming certain planning and administrative responsibilities for several human services programs. The first programs to be involved were Manpower, child development, family planning, the aging, and the WIC (women, infants, and children) nutrition program. This shift was intended to streamline the delivery of numerous uncoordinated programs that left the citizens they were trying to reach confused about the services that were available and where to go for help. The idea was to form a single "umbrella" in the LRO that would be convenient and comprehensible to the people who were served by the programs. Thus, at their own discretion, the 17 regional organizations could move into the human services arena. Until then they had been largely involved with regional physical planning, economic development activities, law enforcement under the Law Enforcement Administration Act (LEAA), and the A-95 review function. Individual LROs varied in their response to this opportunity—ranging from very limited involvement by some to rather extensive activities by others. These latter generally took part in administering, planning, and working with local agency participants—which sometimes added three or four staff positions for the human services activities alone in the LRO organization.[8] (This response to federal programs and proliferation of staff numbers eventually raised concerns from some local government officials, as we will see later in this article.)

Joint Regional Forum. By late 1974 the staff directors of the LROs and staff from the State Department of Administration were meeting every two months. These meetings were aimed at coordinating and sharpening the activities of the local units, the regional organizations, and the state—particularly as they related to federal and state programs. Local elected officials attended some of these meetings but did not participate formally until 1975, when the North Carolina League of Municipalities (NCLM) and the North Carolina Association of County Commissioners (NCACC) organized the Joint Regional Forum. This group has helped to improve communications among the local officials of the NCLM and NCACC, the LROs (staff and related officials), and state officials and staff—particularly in regard to regional affairs or policies that might be developed at the federal and state levels and eventually affect local units. The Joint Regional Forum now has a membership of 18 (one elected official from each of the present 18 multi-county regions) and one at-large chairman. The presidents of NCLM and NCACC each appoint nine members; the authority to appoint a chairman alternates each year between the two presidents. The Joint Regional Forum has responded or reacted to issues that were generated by state or federal agencies and staff or locally through the LRO Directors' Association, which began as an informal group in the early seventies and now meets regularly with the Joint Regional Forum. Normally the Forum meets at least every two months with the Directors' Association and the federal and state agencies that are invited to the meetings or have requested agenda time; usually these agencies are the departments of Administration, Natural Resources and Community Development, and Human Resources.

Regionalism in the late 1970s. The next major state policy with respect to the multi-county regions and their LROs came in Governor James B. Hunt's executive order in October 1978. The Governor had established a Local Government Advocacy Council earlier that year—primarily to give him direct advice and recommendations on state programs or actions that would affect local governments. This group was asked to study the state's policy on multi-county regions; it made sixteen recommendations, many of which were included in the executive order that fall.[9]

Briefly, Governor Hunt's order (1) provided continued state support for the LROs and the regional concept but encouraged using policy boards composed of elected officials, (2) urged local officials to give the LROs the same powers and duties as the General Statutes give the councils of government, (3) required state agencies to make their administrative or service delivery subdivisions within the state coterminous with the LRO boundaries "to the extent possible," (4) directed the state agencies that wanted to change or to begin programs that affected local governments through LROs to submit their proposals to the Local Government Advocacy Council for review before establishing policy, and (5) specified updated guidelines for changing regional boundary lines.

Another state policy in regard to the regions appeared in the Balanced Growth Policy Act of 1979. That act did not require a specific regional role in its implementation, but it noted that "(p)rogress toward achieving balanced growth shall be measured by the strengthening of economic activity and the adequacy of public services within each of the State's multi-county regions . . . ."[10]

INCREASING STAFF AND BUDGETS of the LROs in the 1970s concerned some local officials. As noted earlier, regional organizations now handled some human services work, and this meant staff increases. Some federally assisted programs were then reaching a peak in national funding, and money and additional staff were easy to come by.[11] Some of-

8. This estimated increase is based on published surveys made by the General Assembly's Fiscal Research Division in 1976 and by the Department of Natural Resources and Community Development's Office of Intergovernmental Relations in 1978. The survey made in 1976 (for FY 1974-75) of 15 LROs that responded indicated an average of 18.6 full-time positions, the 1978 survey of 17 LROs showed an average of 22 full-time positions.

9. Governor James B. Hunt, Jr., Executive Order 27, Oct. 23, 1978, N.C. Department of Administration. The Local Government Advocacy Council was also included in the Balanced Growth Policy Act of 1979, N.C. GEN. STAT. Ch. 143, Art. 33A.

10. N.C. GEN. STAT. § 143-506.10.

11. The Department of Housing and Urban Development (HUD) Comprehensive Planning Assistance Program is one example of the availability of federal funding. The program, which was used by all LROs and many local governments (and state

ficials—and many citizens—had a basic, philosophical disagreement with the increases. They felt that increasing federal (or state) funds erodes local autonomy and they frequently protested that the LROs were just "another layer of government." A survey made in 1976 showed that total LRO budgets ranged from $270,000 to more than $4.7 million, the average being $1.8 million[12] LRO staff funds involved only a part of these funds (ranging from 10 to 25 per cent). Most of the budgets involved funds that were passed to local governments and agencies or even to private firms that were delivering services for a federally assisted program—for instance, hot meals for elderly citizens. Overall sources of LRO funds were approximately 87 per cent federal, 8 per cent local (from dues paid on a per capita basis by member governmental units; these local moneys were very often used to provide "matching" funds in securing federal dollars), 3 per cent from the state (usually from a federally assisted program), and 2 per cent from other sources (often in kind, or donated services toward certain projects). In 1976 staff size for the LROs averaged about 19 (the range was from eight employees to more than 40); in 1978 the average was 22 employees per LRO and in early 1980, 21 employees per LRO.[13]

LRO services to local governments changed considerably over the last decade. For example, during the first half of the period all of the LROs produced maps and other documents for physical development plans, and many completed economic development plans or studies—partly to fulfill the requirements for federal funding. (Some of these plans have been useful guides for regional board decisions; many have also been the basic plan or policy document for later projects and grants.) But the LROs have also moved into other spheres of activity. Grantsmanship—that is, helping local governments, particularly those with limited staffs, to develop the documents and applications needed to secure federal and state funding—has become one of their key functions. Regions that were founded with the encouragement of the Appalachian Regional Commission and the Economic Development Administration developed able grantsmen early in the period, and other federal programs encouraged the practice. With the Housing and Community Development Act of 1974 and other federal legislation that supported the New Federalism, hundreds of local governments wanted their LROs to help them secure federal funds for various projects. Usually these projects were some form of water and sewer improvement or extension because this single action could meet urgent present needs, and the community was then in a better position to attract industry.

As the decade moved along, many of the regional governing boards and their staff directors came to feel that they should tailor their regional efforts very specifically toward the needs of their region. Some examples of this trend and activities are included in the following section.

DURING THE SEVENTIES, the regional organizations not only survived but in general gained in stature. Some of them apparently have developed a strong, cohesive relationship among their member units; others have had serious questions about their own worth, and a few governmental units even withdrew their support. (With one exception, all later rejoined.)

The problems of the eighties are different from the problems of the seventies, but LROs appear to be promising vehicles for solving them. They already have chalked up several successes in marshaling cooperative efforts that require the participation of the localities.

The Triangle J Council of Governments has an active Solid and Hazardous Waste Management Planning Committee. This group found that the Research Triangle Park and the major medical facilities just outside the park are among the nation's leading generators of certain hazardous and low-level radioactive wastes. These wastes must now be transported to either of two authorized disposal sites (one on each coast)—a process that is both dangerous and expensive and could cause serious economic and other repercussions if the disposal sites were to be closed. Through the Triangle J COG, the waste generators, the state, and private participants are cooperating to find a disposal site within the region. The COG is an organization uniquely equipped to deal with this problem, and its role in this field may well expand with current efforts to attract microelectronics firms to the area.

The Region D Council of Governments has developed a joint administrative approach with a child development program that is improving the overall health and welfare of children in the Appalachian area. Individual counties and social service agencies had been operating this federally assisted program of prenatal and preschool services, but as administrative requirements and cost grew, the numbers of children that could be served had to be cut. The COG analysis of the staffing assignments and arrangements has made it possible to form just one administrative unit that efficiently serves five county centers but also permits local contact and participation.

The Neuse River Council of Governments did a recent study of county-owned vans that showed that vehicles in some counties were underused, while agencies in neighboring counties were desperate for more vehicles. Cooperative efforts are now being developed that will increase use of some counties' vans and automobiles, thus deferring or eliminating the need to purchase additional vehicles by governments within the region.

This COG has also organized a multi-county effort to deal with old automotive and equipment tires. These bulky items use up landfill sites

government) for many years, had a national appropriation level of $100 million for FY 1975. This amount was reduced each year; Congress appropriated $33.75 million in FY 1981.

12. Based on unpublished data from the General Assembly's Fiscal Research Division. Fifteen LROs responded.

13. Recent figures on staff numbers are from information provided to the North Carolina Department of Natural Resources and Community Development, Office of Intergovernmental Relations.

(which are somewhat scarce in that area because of high water tables) and are difficult to dispose of properly without expensive cutting equipment. COG member governments are arranging for a central, efficient disposal method that will include depositing some of the tires off the coast in a way that will be suitable for a fish habitat.

The Land-of-Sky Regional Council in Asheville is also fostering some major enviromental projects. The COG was instrumental in obtaining TVA funds to provide public access points and facilities and some contract labor for French Broad River clean-up; volunteer groups contributed much time and effort in cleaning up the river. An annual French Broad River Week further encourages public use and appreciation of the river and local facilities. Since this river flows through several counties, the project probably would not have been undertaken without encouragement from a group like the regional council.

ALTHOUGH THESE EXAMPLES are encouraging to supporters of regionalism, many other problems remain—not only for LRO personnel but also for their member governments and for the state. It appears that several key federal programs that have supported core LRO staff will be severely reduced or eliminated. (Criminal justice planning in North Carolina has already been cut back; many agree that the program was worthwhile, but only two or three regions continue to fund the program.) LRO budgets have depended heavily on federal funds. How much—and which portions—of those budgets will the member local governments pick up? And should the state's position in the federal-state-local formula be changed? Over the years, as the state has increasingly aided local small governments and rural counties with land-use and other policies and regulations, a consensus has evolved that the state and the LROs have a legitimate and significant role to play in helping local units deal effectively and cooperatively with shared problems. (Current proposed federal and state budget cuts seem to indicate even fewer on-call staff from both the state and the LROs even though local needs for assistance are sure to continue.) For administrative purposes, a number of state agencies use a variety of territorial divisions; no doubt some of these agencies' functions could be performed more effectively at the regional (LRO) level. As many as 80 subdivisions of state and local agencies—from health services to transportation district offices—occur within a single designated multi-county region. And some services are provided at every county seat purely for tradition's sake, even though population and business have moved elsewhere. These services could equally well be offered from a regional center.

Regional organizations and their local government members face important questions. Coping with problems like rising energy costs requires new ideas and solutions, but the prospects of increasing pressures on local revenue sources will soon bring even greater concerns. Proposed federal and state budget reductions portend serious effects on local programs and needs. Where do regional organizations fit in a shift in authority and responsibility from the federal government to state and local governments? If federal aid decreases, is there still a grantsmanship role for LROs?

LROs may have these functions:

1. Increasing efficiency of local governments. This need is the challenge of the eighties, and it should be a prime area of concern for LROs. Regional organizations could be indispensable in seeking ways for their member units to pool resources and share costs.

2. Improving state-local relations. Regional staff and officials should look analytically at any opportunity that the state gives local units to assume responsibility for service programs. Some "turf problems" may exist in such a realignment of responsibility between the state and the local units, but sometimes the interagency conflicts are simple failures of communication. The LRO can help spot the sources of friction and how to relieve them.

3. Determining local priorities and needs. Priority-setting has always gone on to some extent, but it will become more critical as funds become scarcer. LRO staff should be able to act as professionals in determining and analyzing the alternatives—although the final decisions will be up to the citizens and their elected officials.

4. Keeping the community's feet on the ground. In difficult times people usually prefer *action* to *plans*. LROs should not propose solutions with reckless abandon but rather should look at each situation with reason and an eye to its past history. A realistic, simple solution is always preferable to a grandiose impractical scheme.

5. Promoting cooperation. Many governmental activities need the attention of specialists, augmented by staff from the local units. For example, the LRO can provide a housing specialist for the the whole area who could help local units and developers who deal with "assisted" housing. This person could be available through a local housing authority. Other users could reimburse the LRO for his time at a much lower cost than a full-time housing specialist's salary would cost. Time-sharing of many kinds could be used, thereby making the most of equipment as well as staff.

6. Volunteer assistance. Using volunteer help is not new, but it should be investigated more in times of scarce funds. Volunteer services are not regional in nature, and thus would not appear to be relevant to LROs, but an LRO office and staff could be used to start a project that can be carried on by volunteers. (In the French Broad River Project mentioned earlier, the LRO did the planning and the groundwork, and private groups followed through.)

REGIONALISM AND REGIONAL ORGANIZATIONS have matured in the past ten years, but they still have weaknesses and room for improvement. Local leadership should recognize the possibilities in the organizations and actively participate in them if these organizations are to survive and serve to their potential. While purely local concerns exist, for an increasing number of modern problems, regional solutions are needed—and to find them, the local and state governments must enter into partnerships.

Computerizing Land Records in Orange County

Roscoe E. Reeve

A new system of keeping track of land information makes life simpler for officials and citizens alike.

Editor's Note: At the annual convention of the National Association of Counties (NACo), Orange and Cherokee counties were given the 1981 Outstanding Achievement Award for their land records systems (July 13, 1981).

AN ATTORNEY WALKS into the Chapel Hill Municipal Building—16 miles from the county courthouse at Hillsborough—and sits down before a computer terminal with a keyboard that looks like a typewriter. She presses two keys, and the computer asks her whose property she wishes to research. She enters the name of the person whose house her client wants to buy, and the terminal screen displays a list of properties in that owner's name with a brief legal description of each. She then chooses a number beside the lot her client wants to purchase, and in an instant the screen displays a parcel record of tax information followed by recorded documents concerning that property.

After looking at all of the tax and document-indexing data, the attorney orders the computer to print a copy of this information. The terminal screen then shows that the request is being filled and asks whether she would like to look at the parcel record of the property from which this lot originally came. THE ATTORNEY KEYS IN "Y" for "yes," and "B" for "backward," and immediately the record of the original property as it appeared before it was subdivided shows on the screen.

Later the attorney, using the terminal, can (1) print copies of indexing information for particular documents in the register of deeds' and the clerk of superior court's files; (2) determine from the tax information displayed on the video screen that no taxes are due on this lot; and (3) discover in the land-information display that her client's "dream lot" is in a flood-hazard zone. At the Land Records Building the attorney's printouts are being placed in a folder with her name on it, and she can pick them up when she arrives to do her title search.

The attorney—if she is not new to her work—can remember how title searches were conducted in the recent past. She remembers the various indexing systems that were based on owners' names and were housed in a number of different sets of index books and printouts. She remembers going from office to office at the courthouse and from building to building tracking each name on the ownership chain through files of deeds, wills, and liens. She remembers taking a whole day to drive to Hillsborough and organize her search and then having to come back the next day to examine the documents she had identified. In the new land records system, she has much of the information she needs before she leaves for Hillsborough.

In the municipal building a planner is also asking the computer questions. He wants a list of all properties within the Chapel Hill corporate limits that are zoned commercial, are five or more acres in size, and do not lie in a floodway or an airport hazard zone. Before the computerized system began, he would have spent many days at the tax office in Hillsborough going from map sheets to file drawers seeking information. Now it will be on the terminal screen in a matter of minutes.

In Hillsborough a county planner is "digitizing" a map of soil types for the Agricultural Extension Office (AEO). (Digitizing is the process of converting map information into numerically coded form so that it can be retrieved by a computer.) Since the digitizer is tied into the computer, the planner can provide the AEO with a list of properties by soil type and at the same time record the soil information for each property in its "land information parcel file." When someone eventually wants to develop this land, it can quickly be determined whether the soil is suitable for septic tanks. In the past, filling this request for the AEO would have taken a great deal of time.

In the land records office the transfer of ownership of a parcel from a deed that has just been recorded is being entered into the computer. When the records

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specialist presses the "F" (File) key on her terminal keyboard, she has—in a single operation—updated five files with new ownership information. In the past the deed she has processed would have been handled *five times*, and some of the information might not get into the tax office files for a year.

At the register of deeds' office, a real estate agent is picking up a computer printout on a subdivision in which he has just listed a home. The printout gives him all ownership transfers in that subdivision in lot order with the name of the new owner(s), the name of the previous owner(s), the date of the transfer, and the location of the deeds stored in the record books. These data, not available in this form before automation, give the agent a better view of sales in this subdivision and an updated list of new owners for his prospect files.

These little dramas represent the current and future operations of the new Orange County central land records system, which is not yet fully operational. Although the automated indexing system—permitting inquiry through video terminals—is functional in both the register of deeds' office and the clerk of superior court's office, the State Administrative Office of the Courts has not authorized the regular operation of the automated system in the clerk's office. The land-information portion of the system—used by county planners—has been designed, and its computer programming will begin this summer. The new central land records system uses a "day-forward" approach—only transactions that occurred after the system began operating are recorded in the computer system, and the old manual indexes still must be used in many title searches. The day-forward approach was used because the county lacked the time and money to enter the indexing information for transactions that go back many years in the computer. Thus for the first few years the system's usefulness in title searches will be limited. But since Orange County is growing rapidly, transfers of ownership are frequent, and the system will be very valuable in title searches of residential parcels within approximately five years.

The problem

Real property records are maintained by various departments of county government—the register of deeds, the clerk of superior court, the tax supervisor, the tax collector, and the planning department.

The register of deeds is the county's major recorder of land documents, including deeds, maps and plats, deeds of trust, rights of way, and agreements. The civil files of the clerk of superior court's office contain many important land documents, including wills and estates, liens, and court judgments like foreclosures and divorces. The tax supervisor's office is responsible for all tax-listing, billing, and appraisal functions of the county and also supervises the maintenance and updating of the tax maps—the official inventories of all property located in the county. The tax collector maintains tax payment and lien records. The planning department is responsible for approving development or changes in property as well as granting permits, which will be recorded in the system. In addition, each municipality in the county has a planning office that eventually will be tied into the central land records system.

Each office has developed its own record-keeping system, with little or no interaction between individual departments to improve their record keeping. Those who seek land or title information must search the maze of records that are housed in each office—a confusing task because of the variety of filing and numbering systems.

The computer is a valuable tool in setting up a comprehensive, centralized land-records system that uses a geo-coded parcel identifier number (PIN) as its base. This number is the key to coordinating all indexing and retrieval of real property records.

Historical background

National concern over inadequate land records systems and the increasing cost of land transactions led Congress in 1974 to enact the Real Estate Settlement Procedures Act (RESPA).[1] Section 13 of that act directed the Department of Housing and Urban Development (HUD) to establish "model systems" that would demonstrate new ways to improve the recording of land title information.

HUD awarded grants to six national demonstration sites—both large and small local government units—so that each local jurisdiction could design and implement its own record-keeping system. The only requirements were that the system be transferable and that it reduce the cost of land title transactions to the consumer.

North Carolina received a RESPA grant on September 27, 1978, because it was the only state that already had a program for improving land records and a state office to implement that program.[2]

1. P.L. 93-533.

2. N.C. Gen Stat § 161-22.2, *id.* § 143-345.6, and *id.* §§ 102-15 through -17. The 1977 General Assembly passed these three laws, which (1) authorized registers of deeds to use unique parcel identifier number for an official county indexing system, (2) created the

In 1979 the state Land Records Management Program awarded grants—under the HUD RESPA program—to Cherokee and Chowan counties to demonstrate a modern manual records system and to Orange County to demonstrate a modern automated system.

Goals and objectives

The goals and objectives of the central land title records project were to facilitate, simplify, and reduce the cost of processing, storing, and retrieving land records in Orange County. Besides tax and indexing information from the register of deeds' and clerk of superior court's offices, the project was to provide current land information from various Orange County planning and inspection offices when they had a computer terminal that could be connected to the county's computer by a direct line or a telephone line. This information would include zoning, public safety districts, land-use designations, and permit applications.

The project was to centralize and automate the indexes for all records that affect the title or status of land in Orange County. The system was to include (1) centralized ("on-line") master indexes of recorded documents in the register of deeds' and clerk of superior court's offices; (2) selected tax information from the tax supervisor's and tax collector's offices; and (3) basic land characteristics from the planning offices.

Design and implementation

Using the HUD RESPA grant, Orange County bought equipment to expand the county's computer capacity. It also hired personnel to design and set up an automated system; these people also coordinated the project and supplemented existing staff, which maintained the current system while the new one was being created.

The county was committed to the RESPA objectives, but it also was determined to have a comprehensive land records system designed and operated by the county's own personnel. Orange County's was the only automated RESPA project that did not depend solely on an outside contractor—that could be operated by its own staff.

Land Records Management Program in the State Department of Administration, Office of Administrative Analysis; and (3) authorized state grants-in-aid to counties that want to improve their land records systems.

Developing a comprehensive system that included all five participating offices (register of deeds, clerk of superior court, tax supervisor, county planning department, and data processing department) was a large undertaking. When the project began, some offices were partially automated (i.e., used the computer to some extent for record-keeping), some were fully automated, and one not at all. Officials with different levels of experience with electronic data processing had to be brought to the same level of understanding, risking boredom for some and confusion for others. The educational effort paid off. Even though some of the project participants had worked in the same building together for many years, they learned for the first time how the respective offices worked and how each office's work complemented the others to make up the whole.

The first step in designing the new system was taken when a land records manager was hired on July 1, 1979, to coordinate the project. He held weekly meetings with the five participating offices to report progress, to approve proposed components, and to air and resolve problems until the design was completed late that fall. A land records advisory committee composed of representatives of potential users of the system—attorneys, realtors, surveyors, etc.—met each month until the system was completed. The state Land Records Management staff and a legal consultant from the Institute of Government also worked closely with the county on the project.

From November 5, 1979, until April 1, 1980, a computer program was written for each component of the system and, at the same time, tested by potential users. If the users—staff and citizens of Orange County—felt that changes were needed, the program was modified until they were satisfied. The programming and testing of the system was documented by an existing computer program (known as "toolbag") that produced reports and copies of any changes in the system's programs.

The indexing systems for the register of deeds and clerk of superior court were tested in April and May of 1980. The systems included the new master index of parcel identifier numbers, which recorded documents from each office that identify a parcel of land; a master index of nonproperty instruments (NPIs), which recorded all documents other than land documents (adoptions, name changes, separation agreements, etc.) alphabetically by the names on the documents; an alphabetical printout index of owners ("grantors") and purchasers ("grantees") for the register of deeds; and a "defendant-devisee" and "plaintiff-devisor" alphabetical printout index for the clerk of superior court. The register of deeds already had the printout type of index when the new system

began, but the clerk's office had been totally manual, and it found the printout index very helpful in making the transition to automation. The printout index listed all parties on a document in alphabetical order; named the opposing parties in the transaction, the type of document being recorded (deed, will, lien, etc.), the date of recording, the place where the document is stored (record book, file cabinet, etc.); and briefly described the document or the land specified in the document. When the new master indexes for land parcels and nonproperty documents become Orange County's official indexes—a step that requires that State Department of Administration's approval—they will exist in the computer rather than on a paper printout, and the searcher will be looking at the computer terminal's video screen rather than a printed page.

If adopted in the clerk's office, the new land records system will be a radical change. Instead of five different sets of indexes for recording civil documents, the clerk will have a printout index that combines these into one—a single indexing operation performed by one person. The current manual index operation requires six staff members.

Each office tested its processing and computer procedures through daily and weekly simulations, and on June 1, 1980, the indexing systems for the two offices began to operate.

In July and August 1980, the land records system was linked with Orange County's new automated tax appraisal system, which was designed to determine and record property values for tax assessment purposes in evaluating property (state law requires octennial revaluation). The systems analyst in the county's data processing department designed and set up the tax appraisal system to record parcel data submitted by appraisers in the field as well as data (parcel size, revenue stamps, etc.) from recorded deeds. With the two systems combined, all tax files—parcel, billing, collection, and appraisal—can now be updated automatically at one source as normal daily transactions of the recording offices are processed. For example, if a property owner divides his property into two parts and sells one part, the land records office can instruct the computer to create new parcel identifier numbers and sizes and new tax billing account and collection file numbers. Linking land records with tax appraisal was the last step in meeting the county's objectives for the new system.

From July through September of last year, Orange County demonstrated its system for visitors from many North Carolina counties and surrounding states. On September 30, 1980, when the HUD grant ended, the county assumed the full funding of the central land records system.

Designing and setting up the system cost $198,000 in grant and county funds. All personnel, supplies, improvements to tax maps, and travel costs ($106,000) were paid by the HUD grant. Equipment costs—computer, plotter, printer, etc.—were paid for on a matching basis, with HUD and the county each paying $46,000.

Two new positions were added to the county staff as a result of the project: the land records manager and a microfilm specialist, who is studying the possibility of providing copies of land documents from microfilm, which would be filed according to the parcel identifier number. One register of deeds' staff member was assigned to the clerk of superior court's office for training while the system was being set up and then transferred to the land records office to be cross-trained in updating property tax maps.

How the program operates

The Orange County land records system provides a computerized master file indexing system that permits rapid inquiry into the files of the clerk of superior court, the register of deeds, the tax supervisor, and the tax collector.

Each parcel of land in Orange County is assigned a unique geo-coded parcel identifier number and has a permanent computerized record stored in the master

From left to right: Staff and citizens use video screen terminals to insert or retrieve information. Tax mappers assign (PINs) and create new parcels on the tax maps. Orange County's data processing department maintains the central computer and designed and programmed the new land-records department.

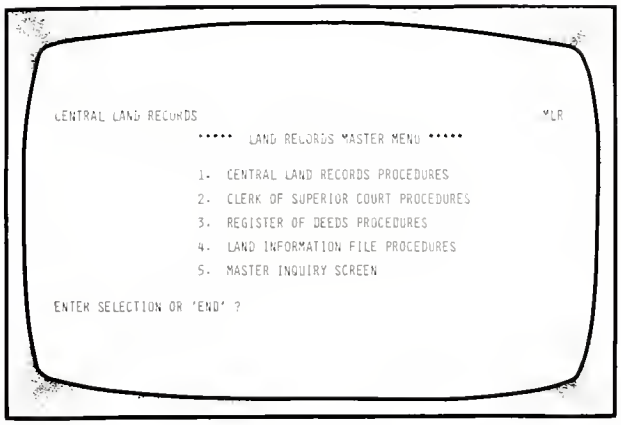

Figure 1

CRT Screen lay-out simulation of the MASTER MENU.

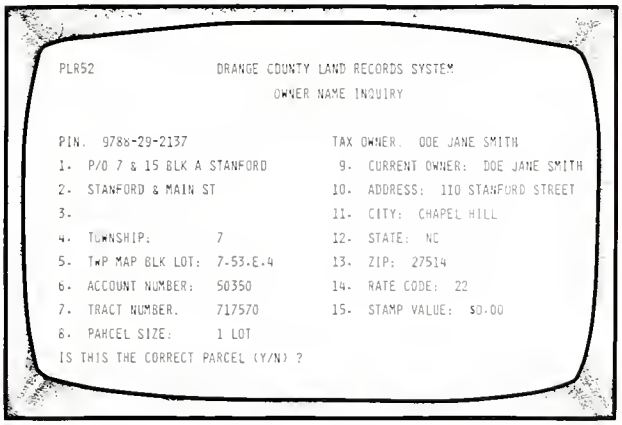

Figure 2

CRT Screen lay-out simulation of OWNER'S NAME INQUIRY from MASTER INQUIRY. Lines 1-3 are parcel description lines; lines 4-7 are from the Tax Billing System; lines 9-15 are from the Tax Appraisal System. "Tax Owner" and "Current Owner" reflect the freezing of ownership on January 1 for taxing purposes in North Carolina.

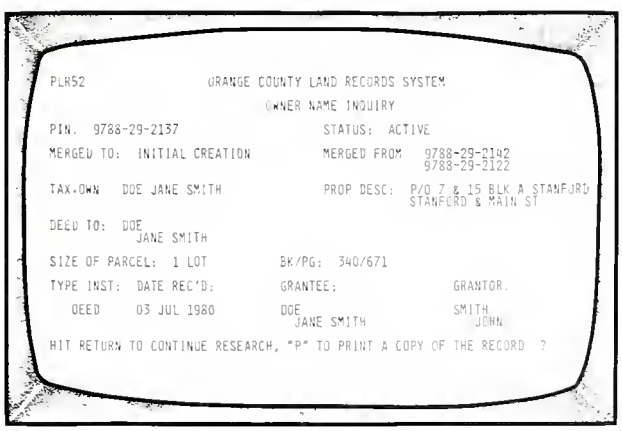

Figure 3

CRT Screen lay-out simulation of Master Index arrived at through OWNER'S NAME INQUIRY. "Status" refers to whether this is a "lot-of-record" that has not been subdivided or combined. You can see that this parcel was formed as the result of a combination ("merge").

one or more new records are created—each with a new identifier number. The old records are retained in the master index file for reference purposes. Each record in the master index file briefly describes the index file. When parcels are consolidated or divided, parcel and directs users to the computer and noncomputer files that contain detailed information. The record also refers to the parcel(s) from which each parcel originated, the parcel(s) with which it has been combined, and any parcel(s) that has been split off from this parcel. This history greatly facilitates tracking a parcel of land from the beginning of the system to the present. A record in the master file is accessible by its "file key," or in some cases a choice of file keys: the unique parcel identifier number, current owner's name, book and page number from the register of deeds, or file number from the clerk of superior court.

Basic features

Orange County's central land records system is based on a few essential components: computer hardware and software; file keys; county property tax maps; document-processing procedures; and master inquiry.

Hardware and software characteristics. The land records system uses one mini-computer with a storage capacity of about 254 million numbers or letters. Up to 32 terminals or printers can be connected with the computer (only 19 are connected now).

The computer runs by a set of instructions—"a program"—written in "data basic" language, which is one of the easiest computer languages and looks like the ordinary words we use in conversation. Orange County's programs are also "menu-driven"—adding or extracting information is done by making choices from a "menu" displayed on the terminal video screen. (See Figure 1.)

Once a choice is made from a "menu," information is put into or retrieved from the computer by a series of questions ("prompts") that appear at the bottom of the video screen. The computer asks a question and the user answers by using the terminal keyboard. Figure 2 shows the "prompt" at the bottom of the terminal video screen that asks whether the screen shows the correct parcel. The user answers by pressing the "Y" key on the terminal keyboard for "yes" or "N" for "no."

File keys. The parcel identifier number is the master key for the system. G.S. 161-22.2 authorizes the use of such numbers for indexing real property records if they are unique, uniform, and permanent. A wide variety of identifier numbers, such as tax map numbers, are used throughout the state, but few if any

meet all of the statutory requirements. A geo-coded parcel identifier—that is, one that reflects the parcel's geographic location in terms of the state plane coordinates—is not required by the statute, but it has a versatility and usefulness unequaled by other types of identifiers. The Orange County land records system's geo-coded parcel identifier meets the law's requirements for uniqueness, uniformity, and permanence.

The parcel identifier number is a 14-digit number representing the paired coordinates of a parcel's visual centroid. In practice, Orange County's system drops the first two and the last two digits. The result is a 10-digit number, such as "9799-50-9403," which can be interpreted according to the old "map-block-lot" system—"map 9799, block 50, lot 9403."

The file key for the register of deeds' office is the book number and page number in the register of deeds' records where a copy of a document is stored. When a computerized index record is filed for the document, it is in the register of deeds' computer file, and the book and page are added to the PIN master index for the appropriate parcel.

A recorded court document in the clerk of superior court's office has a file number representing its location in one of the five civil files of the court system. When a court document describes or identifies land, its computerized index record is added to the PIN master index for the appropriate parcel.

Property tax maps. To set up uniform parcel identifiers, accurate cadastral maps must be prepared. Cadastral maps show the boundaries of each parcel of real property in the county. They must be plotted over planimetric base maps that have been structured within the grid lines of the state plane coordinate system. The state plane grid coordinates, called "X" and "Y," are just like the longitude and latitude lines that appear on any map, and they are used for location or navigation. From the completed cadastral maps, the PIN for each land parcel in the county is created on the basis of the "X" (vertical) and "Y" (horizontal) coordinates of the visual centroid of the parcel.

Orange County's tax maps were a constant source of trouble for the project. When the project began they were over 16 years old and had not been maintained accurately. Because the maps would have cost $500,000 to replace, much work and time was invested in making the coordinates on the existing maps accurate—but errors are still being found. Orange County plans to buy new maps eventually—or may consider a computerized mapping system. The State Department of Administration insists on accurate base maps for those counties that want to participate in its land records grant program. Present estimates are that base maps for the 27,000 parcels located in seven Orange County townships would cost over $850,000.

Documents processing. When a document concerning a parcel of land is recorded in the register of deeds' or the clerk of superior court's office, its basic data is entered, without the PIN, in a computer "work-in-progress" file. A copy of the document is then sent to the tax-mapping section of the tax supervisor's office. If the document is a deed conveying ownership of the parcel from one person to another or describing a lien (claim) on the parcel, the parcel's location and ownership are found on the tax maps and its identifier number is written on a worksheet-transmittal form. If the document is a deed or plat that subdivides a parcel or combines two or more parcels, the tax mappers create the new parcels on the maps and assign new identifier numbers that are entered on the worksheet-transmittal form.

When verification or assignment of the identifier number is complete, the document copy and the worksheet-transmittal form are returned to the originating offices, where the assigned identifier number is entered into the work-in-progress file. Each office then checks its indexing entries, makes corrections, and merges its work-in-progress file to a permanent file. The original document receives the assigned identifier number and then is filed or returned to whoever is recording the document.

Master inquiry. Users, including county staff and citizens, have free access to all information entered into the land records system by the various offices. They can gain access anywhere there is a video terminal connected with the system, which includes most county buildings and the municipal building at Chapel Hill, over 16 miles from the courthouse. Seated at that terminal, the user has access to information that formerly was stored in several locations and filing systems—he can merely look at the information, or he can print a copy of it.

Through the PIN or the owner's name (see Figures 2 and 3), the user can (1) enter the master index and observe all recordings for a property and its basic tax information; (2) trace the history of that parcel forward or backward with a simple command to the computer; (3) enter an alphabetical index to observe all documents that do not identify land; (4) call up an individual document from the register of deeds' office or the clerk of superior court's office and print a copy; and (5) enter the tax files to obtain appraisal or tax-payment information. All of this they can do from one inquiry "menu." User's manuals provide easy instructions for conducting research on the computer, and trained staff are always available to help.

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Using a Computer to Issue Food Stamps:

Rockingham County's Experience

Glenn D. Fuqua and Ronald N. Winn

THE FOOD STAMP PROGRAM is among the most visible and most controversial forms of financial aid to the nation's poor. Over the past ten years Congress has repeatedly sought to provide a program that will speak to the increasing needs of the poor and yet be acceptable to the taxpayers. As a result of these congressional revisions, the program has become ever more complex and difficult to administer locally. This article will describe how the Rockingham County Department of Social Services has used a computer to help administer the county food stamp program. Other counties may find the Rockingham experience helpful as they consider a similar move.

What needs to be done?

The first step in setting up any system is to decide what you want it to do. As novices, and with no other computerized county food stamp system to use as a model, we overlooked some important points. As a result we had to make some design changes later. In the end we realized that our system would have to have these characteristics:

Service delivery. We wanted the system to handle applications for food stamps and issue "ATP cards" (authorization-to-purchase cards, which allow eligible applicants to obtain food stamps) within 24 hours after the applications are approved.[1] When the program was administered manually, issuing food coupons was slow in Rockingham County: An applicant might wait two weeks before he received his food stamps. While this lapse was within the time allowed by state and federal regulations, it was certainly not acceptable to a destitute family that needed food.

Compliance with state and federal requirements. The system should operate within the food stamp issuance and reporting guidelines established by the state and federal governments. In North Carolina the task of issuing food stamps is borne by the county governments. But the counties must comply with numerous regulations of the U.S. Department of Agriculture (USDA) and the state's Division of Social Services. The regulations say that the county shall submit specific reports, keep accurate records, adhere to timely issuance procedures, and leave a clear audit trail of all benefits issued to food stamp recipients. The ability to operate within state and federal reporting guidelines is therefore an important requirement of an effective system—the system *must* do so if the county is to obtain and keep state and federal funding.

Reduction of errors. The system should be able to detect human errors in computing and issuing coupon benefits. Not all human errors can be eliminated through data processing, but a carefully designed system can spot many common errors before benefits are mailed to the recipient (for example, errors in computing benefits, setting inappropriate certification periods, and duplicate issuance of ATP cards). The system should also detect conditions that may indicate fraud by the food stamp applicant—like applying twice in one month, cashing duplicate ATP cards, and applying under different names. The reduction of errors translates into savings for the county and will help to insure that only eligible persons receive food stamp benefits.

Reduction of staff time. Another important goal in using the computer was to reduce and/or control costs. We expected that reducing staff time in processing food stamp applications would be the greatest cost-cutter for the county, allowing staff

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1. No time limit was set for determination of eligibility as far as the computer system was concerned because the process, being mainly interaction between the department's staff and the applicant, does not lend itself to computerization. Federal regulations set a limit of 30 days for eligibility determination. In practice, determination of eligibility takes from a few hours in an emergency to one or two days for the average application.

previously needed for food stamp operations to be eliminated or reassigned to other areas.

Adaptability to program changes. The regulations and procedures of a food stamp program can be affected by periodic congressional actions and changes in the administration of the USDA. A good example of this is the revamping currently being proposed by the Reagan Administration.[2] We wanted the new system to be flexible enough so that it need not be totally redesigned when changes occur (formerly, much staff time was needed to make these changes).

Information retrieval. The system should make data on food stamp cases readily available to those who manage the program, so that employees will not have to search for case record folders whenever they need information on a particular recipient. The system should supply this information through computer printouts or data terminals.

The list of characteristics indicates the goals that the Rockingham County Department of Social Services hoped to accomplish by using a computer for food stamp operations. With these goals before it, the department began to consider how it would get the best combination of "hardware" (type of computer) and computer program (i.e., computer instructions) to meet its needs. Its first two important decisions were (1) whether to employ computer time-sharing and (2) whether to use program integration. Both decisions were negative, at least for now.

Computer time-sharing is the practice of connecting a number of users to one large centrally located computer with each user "sharing time" on the system via data terminals. In many counties the tax department, the elections board, the finance office, and other county agencies share computer time, and this is a viable option for some departments of social services—when a shared county computer is large enough and fast enough to handle the food stamp program adequately, the social services department can make use of it. But most counties are more interested in collecting taxes and producing payrolls than in issuing food stamps, and food stamps will have a low priority with the computer staff. Also, county data processing departments are often overloaded and may simply not have time for food stamp issuance. These conditions existed in Rockingham County, and the county social services department therefore decided that it could deliver services and adapt to program changes best by having its own small computer.

Program integration means that all services offered by the social services department are tied together, so that a minimum of duplication occurs in collecting and processing the data required to deliver the service. Program integration has obvious advantages that should be considered when a system is being designed for a social services department. North Carolina's county social services departments adminster a number of programs—for example, Aid to Families with Dependent Children (AFDC), Medicaid, and Energy Assistance—that serve many of the same people who are served by food stamps. If these programs can share the same "data base"—that is, common information stored in the computer—a more efficient system results. When we first began to develop a computer system for food stamps, we set out to accommodate AFDC and Medicaid data along with food stamp data. But we encountered a problem in that AFDC and Medicaid benefits are mailed out from Raleigh, and all information pertaining to these programs must be submitted to the State Division of Social Services for processing. The state's procedures and information requirements for these programs have been subject to change over the past several years, and we have not yet found a way to get AFDC and Medicaid data into both the state and county computer systems without entering the data twice. The state has recently installed computer terminals in Rockingham County's social services department that eventually will enable the department to inquire directly into the state data base for AFDC and Medicaid once the state's computer program is in operation.

System design

With our informal blueprint of requirements for our system complete, we were ready to purchase a small computer for food stamp operations. Because our department lacked experience in this area, we depended on computer salesmen to define the hardware we would need. In 1977, when we were "computer shopping," the task was simple, since only two companies—IBM and Burroughs—offered a small computer system with local service. (In the past four years the increase in choices of mini-computers has been phenomenal: Now there is a choice of at least seven or eight mini-computer vendors.)

Our final decision was to lease a Burroughs B-80 computer, which we upgraded in 1979 to the Burroughs 800. The 800 has a data-storage capacity of

2. The American Public Welfare Association reports that a reduction of $1.8 billion to $2 billion in food stamp benefits is being proposed in the Reagan Administration budget for FY 82. Inherent in these budget cuts are provisions that will alter the current method of computing food stamp income, deductions, and benefit levels. This would necessitate changes in the computer programming of any system involved in issuing food stamps.

124,000 "bytes" (numbers or characters), an auxiliary magnetic disk storage capacity of 28 million bytes, and a keyboard that operates at 120 characters per second. The computer is equipped with four terminals and a printer that can print 350 lines per minute.

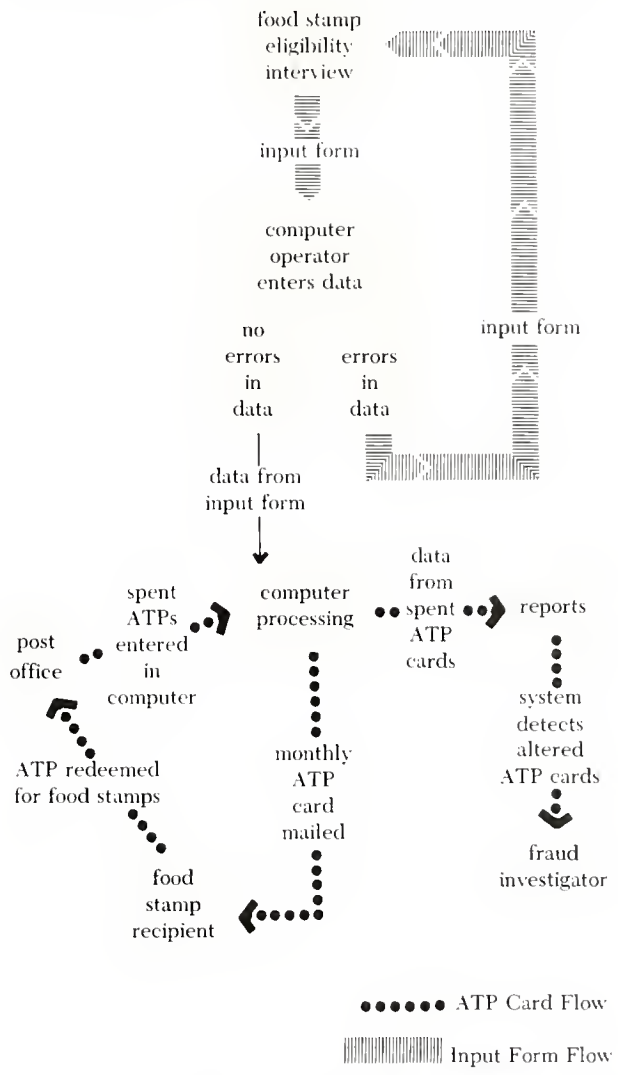
Computer hardware is only part of what is needed to automate a food stamp operation. A set of computer instructions (the program or "software") must be developed to tell the machine how to handle all the data to carry out operations. Rockingham County's first computer program was written by the computer vendor, but it soon proved unsatisfactory. Communicating the county's years of accumulated knowledge about food stamps to programmers who knew very little about this subject was difficult. Even though the feds often changed food stamp rules, requiring compliance in less than one month, the outside programmers could not respond any faster than three to six months.

The original computer program therefore had to be discarded, and the social services department developed its own program. The current program reflects years of experience in issuing food stamps and is compatible with food stamp procedures now used by most medium-sized counties in North Carolina. *Any interested North Carolina county may use the Rockingham program.*

Once the system was installed, the time required to get it up and going was approximately three months. The first year of operation was one of continual change and refinement as the Burroughs program was gradually replaced with the county's program. Over the past three years the computer program has been revised several times to incorporate new and better techniques for processing food stamp application—an ongoing process.

Figure 1

How the Food Stamp System Works in Rockingham County



System operation

To show how the food stamp system works in Rockingham County, we can start with the initial interview and follow through to the issuance of benefits. (See Figure 1.) Certifying and issuing food stamps begins when an applicant comes to one of the three social services department offices (in Eden, Mayodan, and Reidsville). An eligibility specialist interviews the applicant, reviews his or her financial situation, and determines whether he or she is eligible for food stamps. If the applicant is eligible, depending on his or her income, family size, etc., the interviewer recommends that the applicant be awarded a monthly allotment of coupons ranging in value from $10 to over $800 and for a time period of one to twelve months. Allotment information, along with other pertinent information about the applicant, is entered on an input form and sent to the computer operator. (The county's input form was developed to replace a similar state-issued form; no other paperwork is necessary to satisfy the state's requirements.)

The computer operator enters the data into the system. The system immediately detects such certification errors as: mistakes in computing the coupon amount; certification of previously terminated cases; inappropriate certification periods; certification of families that are over the allowable

income level or have been found guilty of fraud; and assignment of duplicate case numbers or application by the same recipient to two different offices within the county. If the system discovers an error in the data, the input document is returned to the eligibility specialist for correction of the problem. If no errors exist, the computer processes the data, and at the end of the day an ATP card is automatically printed for each newly eligible applicant. These cards are mailed to the applicants, who may then redeem them for food stamps. (The system will continue to issue one ATP card per month with no further human prompting until the recipient certification period expires. The computer automatically generates a notice of when a recipient's certification period expires; this notice is mailed to the recipient to alert him to reapply in the next month.)

After a food stamp recipient receives his ATP card, he redeems it for food stamps at a post office, which returns the used ATP cards to the county department. All of these ATP cards must be reconciled for validity in much the same way as a checking account is balanced. The used cards are keyed into the computer to be checked for alteration of coupon amount, forgeries of ATP cards, receipt of more than one ATP card per month by a recipient, and redemption after the expiration date. If a possible fraud is found in a used ATP card, the case is referred for investigation and possible action. All correct ATP cards are processed by the system and the data are entered in the following required reports:

Participation report. This monthly state and federal report contains statistical breakdowns of all recipients of food stamps in each monthly period. The USDA uses this report to compile total food stamp participation levels for the nation. Under the old manual issuance system, this report required about ten manhours to prepare; the computer report takes about twenty mintues.

Racial/ethnic report. The USDA requires a semiannual report that contains a breakdown of all food stamp recipients by racial and ethnic characteristics. This report took approximately six hours to prepare with the manual system but ten minutes with the computer.

Quality control report. The quality control report goes to the State Division of Social Services at the end of each month. It lists everyone in the county who applied for or received food stamps during the previous month. The state uses this report to compile a sample listing of cases to be reviewed for quality control. Before computerization, the report took two to three days to complete; it now takes fifteen minutes.

Caseload survey. The agency uses the caseload survey to evaluate manpower needs in the food stamp unit. The report gives the geographical distribution of recipients and lists the number of case actions per worker. This information is helpful in allocating food stamp eligibility staff most effectively.

Custom reports. The speed with which all types of statistical data are available (a few hours) has been valuable for planning purposes and everyday screening of food-stamp caseloads.

Besides fulfilling the food stamp issuance and reporting requirements, the system has several other features that have been useful to the agency.

Terminal inquiry. The department maintains computer terminals in all three offices. With a terminal, any staff member can obtain information on all food stamp cases within a few seconds. The information available on any case includes the amounts and dates of the last fourteen ATP cards issued and a complete certification history.

Mass changes. Several times a year the federal government issues rule changes for the food stamp program that affect almost all recipients' allotments. Before the computer system existed, allotments had to be recomputed by reviewing each active case individually, which often took several weeks and involved seven to eight employees. These changes are now handled by the computer system within a few hours.

Emergency service for destitute applicants. Some food stamp recipients are categorized as destitute and must, by law, receive their benefits within three days of application. Since all completed applicants are processed within thirty hours (two hours for emergency cases), this requirement no longer troubles Rockingham County.

Evaluation

The effects of computerizing the food stamp program in Rockingham County are easily documented. Before installation, the county had 1,900 active food stamp cases and used three clerks along with four to five typists at the first of the month to produce ATP cards. The current caseload is over 3,000; only one clerk and no typists are assigned to the production of ATP cards. We estimate that at current caseload levels, returning to a manual system would require at least three and one-half more clerical positions on the staff. Salaries plus fringe benefits for these positions would amount to an annual cost of $39,343. The computer system has an annual cost of around $30,000. If a comparable computer

system were acquired in today's highly competitive market, the cost would be even lower.

Other aspects of the system contribute to further cost savings. The present system is operating well below its full capacity. Food stamp applicants could double with no need for additional computer equipment or staff. The social services department is therefore protected from increases in operating costs that otherwise would accompany increases in food stamp participation. Further savings result whenever a new federally required change in food stamp regulations or allotments is made. The computer system handles these changes and eliminates the overtime pay and/or compensatory time formerly allotted to employees who made these adjustments "by hand" in each case.

Because the Rockingham County social services department's mini-computer has been used for other social services besides food stamps, savings in other areas have also been realized. The mini-computer is used for Medicaid, the federal Chore Service Program (which provides assistance to the elderly with cooking and cleaning in their own homes, thus postponing their need for nursing care), enforcement of child-support laws, and caseload management reports for nursing and rest homes and foster homes. Other computer applications are planned for the future.

Rockingham County's experience may be helpful to other counties that are considering the use of computers for issuing food stamps. The point we wish to make is that installing such a system involves more than buying a machine and punching a few buttons. A social services department will have to do considerable work to use a computer effectively, but the effort is worthwhile in reducing cost and increasing efficiency.

The era of unlimited federal funding for social programs is coming to a close. Investment in more efficient systems for delivering social services is one way to provide for the poor while conserving the tax dollars. In Rockingham County we feel that computer technology is the right investment for both the needy and the taxpayer. ■

Computerizing Land Records

Conclusion

The Orange County central land records system primarily serves attorneys who are doing title searches, but it is also appreciated by both realtors and surveyors. Many citizens have already learned how they can find out information about their own property or property they may want to buy.

An unexpected benefit of the central land records system has been that it changed tax-processing procedures so that all tax files are now updated automatically by the daily normal transactions of the recording office that are entered by one input clerk.

New uses are being discovered as other county agencies and committees recognize the potential of the parcel identifier number system. The emergency communication system ("911") is exploring the locational possibilities of this system. The county's Agricultural Task Force has realized that farming areas and their environs can be "flagged" (coded by the computer), and thus public notice will be given to prospective developers or purchasers that certain properties are located in an active agricultural area and could be subject to animal odors and noises. The local bar and realtors are interested in buying a terminal that could be used by all members—and this could generate some revenue for the county.

The program is now covered by regular funding of the register of deeds' and tax supervisor's offices. Staff size should remain the same for the next two years. The next addition to the program, beginning in mid-1981, is the land information system, which will tie in the county's planning departments to the system.

THE FOLLOWING are the features of the central land records system that have been most important to Orange County:

— It provides much information to both officials and citizens in a fraction of the time previously required.

— It eliminates the need for costly special staff commitments of time in the tax office to update their files and maps on a yearly basis.

— It makes the tax office better able to reappraise property for assessment purposes without hiring an outside contractor.

— Data from the transfer of property that used to be entered in five different offices by five different staff members are now entered by one staff member at one location.

— The system's on-line terminal information-retrieval capability eliminates the need for repeated printouts of updated indexing data, thus saving 400 pounds of paper each month. ■

POPULAR GOVERNMENT
(ISSN 0032-4515)
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